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Are Students Competent? Methods of Assessing Bachelor of Social Work Student Competence

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ARE STUDENTS COMPETENT? METHODS OF ASSESSING BACHELOR OF SOCIAL WORK STUDENT COMPETENCE

by

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ABSTRACT

Higher educational institutions must demonstrate that their Bachelor of Social Work (BSW) students are competent prior to graduation. There are conflicting studies regarding the reliability of field instructor, faculty, and students' self-assessment. The purpose of this study was to examine the consistency of how field instructors, faculty, and students assessed the same students' social work competence across three academic years. This quantitative research study examined historical data from one Midwestern University where students, faculty, and field instructors rated students' competence in the last semester of their senior year using the Council on Social Work Education's (CSWE) 13 core competencies (2.1.1-2.1.10d). Data analysis included descriptive statistics, 39 Kruskal-Wallis H tests, 13 Friedman's test, Bonferroni correction, and a False Discovery Rate, due to the large number of statistical tests conducted using the same data set. The field instructor and faculty sample were similar (n = 83); however, the sample for student self-assessment was n = 45. Findings indicated that faculty assessment of students' social work 13 core competencies was the most inconsistent across three academic years, whereas field instructors' assessment was the most consistent. When comparing how faculty, field instructors, and students assessed the same students, finding indicated that faculty and field instructors were more closely aligned than students and field instructors and students rated their own social work competence higher than faculty on two core competencies and higher than field instructors on four core competencies.

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INTRODUCTION

Higher education must be dedicated to ensuring that students who graduate are proficient and prepared to work competently in a professional setting (Fletcher, Meyer, Anderson, Johnston, & Rees, 2012). Without effective methods of assessing student competence, it is a mere gamble as to whether institutions of higher learning are graduating capable and qualified students into the workforce. Using valid and reliable methods of assessment to ensure student competence prior to graduation is important in protecting the integrity of the higher education institutions. Furthermore, in disciplines like nursing, teaching, and social work, where graduating students will work with at-risk and vulnerable populations, it is vital that institutions of higher learning are confident that their methods of assessing student competence are valid and reliable (Alperin, 1996).

Nursing programs utilize a myriad of methods to assess student competence, including: students' self-assessment, preceptors rating student performance in clinical settings, portfolios, various clinical scales, and reflective student journaling designed to assess growth (Way, 2002). Teaching programs utilize portfolios, standardized testing, project completion, case study, and extensive student-teaching opportunities where students can be observed and measured by multiple professionals to ensure competence (Aldoshina, 2014).

There are various methods of measuring Bachelor of Social Work (BSW) student competence prior to graduation. The Council on Social Work Education (CSWE) is the accrediting body for BSW academic programs (Council on Social Work Education, 2008). The CSWE requires that student competence is measured using 13 core competencies (2.1.1-2.1.10d) and 41 practice behaviors. The 13 competencies are broad categories while the 41 practice behaviors are more detailed and assigned under the 13 core competencies (Council on Social Work Education).

Every eight years, all accredited BSW academic programs are required to provide two independent data sources verifying that the academic program measures and ensures BSW student competence prior to graduation. According to the Council on Social Work Education (2008), the best method to assess student competence is field instructor assessment, where a professional social worker has observed and evaluated the BSW student in a clinical setting for at least 400 hours. The field instructor assesses the student on all 13 core competencies and all 41 practice behaviors in a clinical setting. The CSWE considers field instructor assessment to be the signature pedagogy and BSW programs are required to provide field instructor assessment data related to student performance in order to remain accredited.

BSW programs are allowed to choose their second method of measuring and reporting student competence to the Council on Social Work Education (2008). After field instructor assessment, the most common methods of evaluating BSW student competence are faculty assessment and students' self-assessment of performance. Faculty assessment involves faculty measuring student competence through the completion of various assignments where the 13 competencies and 41 practice behaviors are embedded

into the coursework (Bogo et al., 2011). Students' self-assessment involves social work students rating their own performance related to the 13 core competencies and 41 practice behaviors. Bachelor of Social Work programs can utilize other methods of assessing student competence; however, student self-assessment, field instructor assessment, and faculty direct assessment are the most common methods utilized by social work programs (Council on Social Work Education).

Statement of the Problem

Assessment outcomes have serious implications for BSW students' graduation from an accredited social work program. Furthermore, assessment outcomes also impact students' future education and future career opportunities. (Sussman, Bailey, Richardson, & Granner, 2014). Assessment outcomes can be high stakes for students, yet the Council on Social Work Education (2008) recognizes students' self-assessment as holding equal merit to faculty direct assessment of students' core competence.

There are conflicting studies regarding the reliability of field instructor, faculty, and students' self-assessment (Achcaoucaou et al., 2014; Bogo et al., 2004; Bogo, Regeher, Power, & Regeher, 2007; Bogo et al., 2006; Chan, Lam, & Yeung, 2013; Choi & Bakken, 2013; Cole, 2009; Dunagan et al., 2014; Geisinger, 1980; Güvendir, 2014; Jenner et al., 2006; Macgowen & Vakharia, 2012; O'Boyle, Henley, & Larson, 2001; Rawlings, 2012; Sussman et al., 2014; Ward et al., 2003). In addition, there do not appear to be current studies evaluating and comparing the consistency of field instructors, faculty, and students' when assessing the same educational core competencies across three years. More evidence is needed in order to understand the reliability of field

instructor assessment, faculty direct assessment, and students' self-assessment and how these three methods of evaluation correlate when comparing outcomes related to the same educational objectives.

Background

There is extensive history of higher educational institutions utilizing various methods of assessment in order to ensure that students are proficient in critical academic and professional outcome measures (Fletcher et al., 2012). According to Haviland, Turley, and Shin (2011) assessment in higher education has been primarily motivated by two overarching objectives. First, assessment is expected to consist of defining educational program outcomes, data collection, and ongoing data review that drives continuous improvement. Secondly, assessment is expected to hold faculty and higher learning institutions accountable for providing students a quality education.

Since 1990 the availability of financial resources in order to gain a college education has increased (Drisko, 2014). Access to a college education and the variety of methods to earn a degree have expanded extensively thus requiring the development of methods of assessment in order to ensure quality programming and student competence are achieved. As a result, the field of social work has experienced an increase in expectations of accountability and measurements of student competence (Alperin, 1996).

In an effort to align with mandates that require higher learning institutions to provide evidence of student achievement and academic quality, in 2008 the Council on Social Work Education (CSWE) adopted an outcomes-focused approach to education (Drisko, 2014). The Educational Policy and Accreditation Standards (EPAS) were developed by the CSWE in an effort to target specific, relevant outcomes expected of

social work students in order to effectively practice in the field of social work (Drisko). Data related to the quality of an educational program is only as good as the methods used to assess student performance and teaching institutions (Crisp & Lister, 2002).

Rodgers, Grays, Fulcher, and Jurich (2013) conducted a mixed methods study in order to understand factors that might impact methods of assessing educational programs. Rodgers et al. found that the quality of a program's assessment methods can be impacted by relatively benign catalysts, such as new leadership, educational environment, and even the writing skills of the assessment author. Rodgers et al. demonstrated that multiple methods of assessment were needed in order to obtain an accurate picture of student competence in educational settings.

Furthermore, Marrero, Bell, Dunn, and Weiss Roberts (2013) conducted a quantitative study in order to assess the core competencies of professionalism in psychiatric residency education. Marrero et al. demonstrated that the related field of psychiatry was also examining methods in order to effectively measure student competence. Furthermore, Marrero et al. indicated that varied methods of assessment are needed when evaluating student competence.

When evaluating the three most common methods of assessing student competence in social work and related fields of study, research demonstrated support and also challenges for each method of assessment. For example, when assessing the reliability of field instructor assessment, Sussman et al. (2014) demonstrated that experienced field instructors consistently based their assessment of student competence

on the student's emotional maturity and the ability to grow and change. Neither of those factors accurately measures a student's social work knowledge objectively, based on the CSWE's 13 core competencies and 41 practice behaviors.

Conversely, Bahous and Nabhani (2011) supported the importance of field experience for bachelor-level education students. In fact, Bahous and Nabhani found that practice in a field setting enhanced knowledge that was taught in the classroom and validated learning outcomes. Bahous and Nabhani suggested that field assessment provided a reliable third party assessment of student competence in the field of education.

When evaluating the reliability of students' self-assessment Achcaoucaou et al. (2014) found that measuring student competence using self-report assisted academic programs in understanding the strengths and weaknesses of their educational programs. However, Fitzgerald, White, and Gruppen (2003) demonstrated that medical students underestimated their skills as they entered an actual clinical setting. In fact, Fitzgerald et al. also discovered that self-assessment accuracy was an individualized characteristic where students who assessed their skills accurately continued to self-assess accurately throughout the study. Furthermore, Fitzgerald et al. also found a correlation between accuracy in self-assessment and familiarity of the tasks performed. In other words, students accurately self-assessed their own performance when completing a familiar task. However, when students were required to complete tasks in a new setting, accuracy waned. Fitzgerald et al. suggested that self-assessing knowledge is very different than self-assessing performance.

In addition, Cheng and Liou (2013) discovered inconsistencies when nursing students assessed their own skill level and competence. In fact, Cheng and Liou

established that nursing students were overconfident in assessing their practice skills initially, yet when graduation approached, student's confidence dipped, even when performing basic skills. Cheng and Liou concluded that self-assessment might not be a consistent and reliable method of assessing student competence.

Finally, when evaluating the reliability of faculty direct assessment, Gorton and Hayes (2014) found that preceptor observations were a reliable method of assessing nursing student competence. Gorton and Hayes supported the notion that a third party assessor is more reliable than student self-assessment of competence. Conversely, Sowbel (2011) supported using various methods of assessing social work student competence in an effort to reduce the potential for grade inflation and in order to provide a more accurate assessment of the quality of a social work program. There is conflicting research findings related to the validity of field instructor assessment. Furthermore, there is a lack of current studies comparing faculty, students', and field instructors' assessment of social work students' competence. More evidence is needed in order to understand the reliability and validity of how student, faculty, and field instructor assessment correlate when comparing outcomes related to the same educational objectives.

Research Questions

The purpose of the current study was to evaluate three different methods of assessing Bachelor of Social Work (BSW) students' 13 core competencies in order to understand how consistent students' self-assessment, field instructor assessment, and faculty direct assessment were across three academic years when comparing the same educational objectives. When reviewing the literature, there were varied reports about the

reliability of student, faculty, and field instructor assessments and there were no current studies comparing how these three raters evaluated BSW students across a three year period.

This study evaluated three years of historical data from one Midwestern, accredited BSW program, where field instructor, faculty, and students' self-assessments were gathered during the final semester of field experience for graduating seniors. Field instructors, faculty, and students all evaluated performance based on the Council on Social Work Educations'13 core competencies and 41 practice behaviors. This study investigated the following two research questions:

1. What are the differences or similarities in how: faculty assess Bachelor of Social Work student competence across three years, field instructors assess student competence across three years, and students self-assess competence across three years?
2. What is the consistency across the raters when comparing how faculty, field instructors, and students assess the same Bachelor of Social Work students' competence across three years?

Description of Terms

Bachelor of Social Work. (BSW). Undergraduate degree in social work (Council on Social Work Education, 2008)

Clinical Setting. Synonymous with Field Placement Site. In social work a clinical setting can include a variety of locations (hospitals, residential care facilities, schools, nursing homes, child welfare facilities); populations (veterans, children, elderly, disabled, poor); and levels of intervention (individual, families, groups, organizations, and communities) (Council on Social Work Education, 2008).

Competence. The ability to fully, properly, efficiently, and effectively perform a task (Drisko, 2014).

Core Competency. Evidence of specific knowledge, values, and skills related to a professional field of study (Council on Social Work Education, 2008). See Appendix A for a list of the 13 core competencies and 41 specific practice behaviors.

Council on Social Work Education. (CSWE). The organization that monitors and accredits Bachelor of Social Work and Masters of Social Work programs (Drisko, 2014).

Faculty Assessment. Individual and group coursework that is completed by students and assessed by faculty in order to measure student competence of key concepts related to the Council on Social Work Education's core competencies and practice behaviors (Crisp & Lister, 2002).

Field Instructor. A social worker who has earned a Masters of Social Work degree or a Bachelor of Social Work degree and at least two years of experience in the field of social work who is willing to oversee and evaluate a social work student's performance in a clinical setting and offer a minimum of one hour of weekly supervision to the social work student (Council on Social Work Education, 2008).

Field Instructor Assessment. A practicing social worker who measures student performance in a clinical setting related to the Council on Social Work Education's core competencies and practice behaviors (Council on Social Work Education, 2008).

Field Placement. A clinical setting where a social work student works a minimum of 400 hours, while being observed, mentored, and evaluated by a practicing social worker on all of the core competencies and practice behaviors required by the Council on Social Work Education. Students are incorporated into the professional setting and given

opportunities in order to demonstrate their ability to effectively practice social work knowledge gained in an academic setting (Council on Social Work Education, 2008).

Practice Behaviors. Outlined by the Council on Social Work Education and assigned to one of the 13 core competencies, the practice behaviors are specific professional knowledge, values, and skills a social work student must proficiently demonstrate prior to graduating from a Bachelor of Social Work or Masters of Social Work program (Council on Social Work Education, 2008). See Appendix A for a list of the 13 core competencies and 41 specific practice behaviors.

Signature Pedagogy. The teaching and learning interactions in which the student acquires and demonstrates the knowledge, skills, and values of the profession of social work in a field education setting and assessed by a practicing social worker (Council on Social Work Education, 2008).

Student Self-Assessment. Students completing structured assessment instruments in order to measure their own reflective learning and critical thinking related to their knowledge, values, and skills required in the social work profession (Crisp & Lister, 2002).

Significance of the Study

This study was significant because information related to understanding the validity and consistency of the most common methods of assessing social work student competence could improve academic and professional outcomes in social work education. Careful examination of faculty, field instructor, and students' self-assessment could provide insight into best methods of assessing various areas of student competence. In addition, this study could provide insight into methods that are ineffective or

inconsistent in measuring specific areas of student competence. This study might reinforce previous research findings; however, it might reveal gaps or even a need to utilize multiple methods when assessing social work student competence.

Social work is a helping profession that is designed to empower vulnerable and at-risk populations in our society (Council on Social Work Education, 2008). Gambrill (2014) discussed the importance of social work education assertively working to manage avoidable ignorance. In other words, Gambrill challenged social work professionals to examine practices, beliefs, and assessment methods in order to escape avoidable ignorance that can impact present and future delivery of services.

The purpose of this study was to evaluate three different methods of assessing BSW student competence in order to identify relationships and differences between students' self-assessment, field instructor assessment, and faculty assessment when evaluating the same educational objectives. The significance of this study was to provide insight into effective methods of assessing BSW student competence and identify gaps that can improve academic and professional outcomes in social work education. This current study examined three years of historical data where BSW students had been assessed by faculty, students, and field instructors to assess consistency within and among the three groups of raters. This study was designed to explore existing data that might reveal gaps in assessment techniques that should be addressed or best practices that should be incorporated in order to ensure quality evaluation of student competence in social work education.

Process to Accomplish

This study was conducted using three years (2012-2014) of de-identified, historical data from field instructors, faculty, and students from one Midwestern, accredited Bachelor of Social Work (BSW) program. All students were assessed in their final semester of the social work program. All students were enrolled in a 450-hour field placement in a clinical setting during the time of each assessment.

A total of 83 social work students were assessed across three academic years (2012-2014). Faculty and field instructor assessment scores were available for all 83 social work students. Students' self-assessment scores were available for 45 of the 83 BSW students.

Each student had a field instructor overseeing their work in a clinical setting. Sometimes the same field instructor assessed more than one student; therefore, there were 75 field instructors for 83 students across a three-year time period. The field instructors were social work professionals who either had a Masters of Social Work (MSW) degree or a BSW degree and at least two years' experience in the field of social work.

Faculty assessment was provided by three different social work field directors. One faculty assessed all students in 2012, a different faculty assessed all students in 2013, and a third faculty assessed the students in 2014. Each of the faculty assessed the BSW students during the final semester of their senior year.

Upon receiving approval from the Institutional Review Board (IRB), this researcher gained authorization from the Midwestern University to access three years of de-identified, historical data from their accredited BSW program, including the field instructor 450-hour assessments scores for each of the 13 core competencies, faculty

assessments scores of the 13 core competencies, and students' self-assessment scores of the 13 core competencies. Each assessment tool measured students' competence during the final semester of their senior year when students are in field placement.

CSWE assigns specific practice behaviors to each area of competence; therefore a core competency could include between one and six practice behaviors. For example, core competency 2.1.1 (Professional Identity as a Social Worker) includes six practice behaviors, while core competency 2.1.10d (Effective Evaluation) only includes one practice behavior. In this study, field instructor assessment, faculty assessment, and students' self-assessment tools each evaluated all of the 13 core competency areas required by the CSWE. See Appendix A for a list of the CSWE's core competencies and the practice behaviors.

Field instructors supervised and mentored BSW students in a clinical setting and provided the social work program with an evaluation of the student's performance after 225-hours in field placement and again after 450 hours. For this study only the 450-hour field instructor assessment scores were utilized. The field instructor assessment tool evaluated all 13 core competencies and all 41 practice behaviors required by the CSWE.

Field instructors provided a rating of student performance in each area using a four-point rating scale, where the options were exceeds expectations, meets expectations, needs improvement, and unacceptable. For the purposes of this research study, exceeds expectations was given a score of four, meets expectations a score of three, needs improvement a score of two, and unacceptable a score of one. Each student's practice

behavior scores were compiled and averaged into the respective core competency score. The core competency scores were entered into SPSS for each of the individual students for each of the three academic years.

The three social work faculty evaluators assessed the students' performance using the same rubrics and in the final semester of the students' social work program. Faculty used these rubrics to assess students' competence related to the CSWE's 13 core competencies. The six assignments assessed by faculty included a stress and boundary issues paper, a case presentation paper, an in-class case presentation, a professional ethics paper, an agency analysis, and a semester project.

Faculty rated students' performance for all six assignments using a four-point scale where 0-69% represented unacceptable, 70-79% represented needs improvement, 80-89% represented meets expectations, and 90-100% represented excellent performance. For the purposes of this study, excellent was given a score of four, meets expectations a score of three, needs improvement a score of two, and unacceptable a score of one. The practice behavior scores were compiled and averaged into the respective core competency score. The core competency scores were entered into SPSS for every student, for each of the three academic years.

Students' self-assessment was provided by 45 different senior BSW students, across each of the three academic years, at the end of their final social work semester, concluding field placement. Students rated their confidence in their ability to perform the CSWE's 13 core competencies and practice behaviors on a standardized posttest tool provided by the social work program at the end of the field placement semester. Students used a four-point scale to rate their own ability to perform the social work practice

behaviors as confident, somewhat confident, somewhat unconfident, or unconfident. For the purpose of this study, confident was given a score of four, somewhat confident a score of three, somewhat unconfident a score of two, and unconfident a score of one. Each student's practice behavior scores were compiled and averaged into the respective core competency score. The core competency scores were entered into SPSS for each student, for each of the three academic years.

To determine if there was a difference in how: faculty assessed Bachelor of Social Work student competence across three years, field instructors assessed student competence across three years, and students self-assessed competence across three years (Research Question One) this researcher conducted group comparisons, using rank means, to determine the consistency of each of the three groups of raters. More specifically, this researcher conducted a total of 39 Kruskal-Wallis H tests to answer research question one. First, the researcher conducted 39 Kruskal-Wallis H tests (13 to assess faculty, 13 to assess field instructors, and 13 to assess students' self-assessment) to determine if there were statistically significant differences in how each of the group raters assessed students' 13 core competencies when comparing 2012, 2013, and 2014. When statistically significant differences were found, pairwise comparisons with a Bonferroni correction were conducted to understand where the statistically significant differences existed and to reduce familywise error. Lastly, this researcher conducted a False Discovery Rate to reduce the likelihood of a type II error, due to the large number of statistical tests conducted using the same dataset.

To determine if there was consistency across the raters when comparing how faculty, field instructors, and students assessed the same Bachelor of Social Work students competence across three years (Research Question Two) this researcher

conducted group comparisons, using rank means. More specifically, this researcher conducted 13 Freidman's tests to determine if there was consistency in how faculty, field instructors, and students rated the same BSW students' core competence. When statistically significant differences were found, pairwise comparisons with a Bonferroni correction were conducted to understand where the differences existed and to reduce familywise error. Lastly, this researcher conducted a False Discover Rate procedure to reduce the likelihood of a type II error due to the large number of statistical tests conducted using the same dataset.

Summary

Effective assessment of student outcomes is critical in the field of social work education (Drisko, 2014). The Council on Social Work Education (2008) considers field instructor assessment to be the signature pedagogy and insists that accredited programs provide data from field instructors when evaluating the quality of a social work program. Faculty assessment and students' self-assessment are considered equivalent by the CSWE and either form of assessment can be offered as evidence of student competence in social work education. Research in social work and related professional fields of study demonstrated conflicting research regarding the validity and consistency of field instructor, faculty, and students' self-assessment when measuring students' competence. This dissertation extends this body of knowledge as a comprehensively applied research study, testing the consistency within and between the three most common methods of assessing BSW student competence. Relevant scholarly literature related to this dissertation is systematically explored in the next chapter.

CHAPTER II

REVIEW OF THE LITERATURE

Introduction

This literature review provided an introduction to the importance of assessment in higher education. Furthermore, this literature review explored the various types of assessment that are commonly used in higher educational programs and also summarized other literature reviews that have been conducted in related fields of study. For example, teaching, nursing, and social work are all accredited programs that require competency assessments of students' performance, skills, and knowledge during coursework and within a clinical setting. This chapter also outlines previous research studies that have explored the use and the reliability of faculty assessment, field instructor assessment, and students' self-assessment when examining student competence. Finally, this dissertation demonstrated that there are no studies that have examined social work student competence, across a three-year span, where faculty, field instructors, and students have assessed students' competence using the 13 social work core competencies.

Historically, clinical competence arose in the United States as an alternative to intelligence testing when high levels of acumen were not perceived as being necessary for certain jobs (Watson, Stimpson, Topping, & Porock, 2002). These vocations tended to include manual labor and were not seen as professional careers; therefore, testing laborers

to ensure they could perform specific tasks seemed more valuable than intelligence testing. However, assessing competence is now securely engrained within professional careers like nursing, education, and social work.

Assessing competence has deep-rooted issues related to defining competence, identifying thresholds that demonstrate competence, eliminating potential subjectivity in the evaluation process, and proving the validity and reliability of the tools used for measuring competence (Watson et al., 2002). Furthermore, evaluating an individual's skill versus qualities can be tricky to separate; and, anytime evaluators are involved in the assessment process there is an intrinsic danger of subjectivity or bias.

Regardless of the inherent issues related to measuring student proficiencies, the practice of assessing competence in higher education is necessary to ensure that universities are providing the best educational opportunities to students, monitoring performance indicators, and producing qualified students into their respective professions (Borhan & Jemain, 2012). Furthermore, professional credentialing bodies are required to ensure that educational programs have methods of assessing and ensuring student competence (Kaslow et al., 2007). In fact, in order to avoid scrutiny and legal consequences, universities must effectively assess, screen, remediate, and even dismiss students who fail to meet competency standards.

Achieving and maintaining accreditation is considered the gold standard of quality in higher educational institutions (Jackson, Davis, & Jackson, 2010). Accreditation requires ongoing assessment of educational programs to ensure quality standards are maintained. In addition, accreditation promotes the public's confidence in the institution's ability to monitor, assess, and produce quality student outcomes.

"Assessment of competence fosters learning, evaluates progress, assists in determining the effectiveness of curriculum and training programs, advances the field, and protects the public" (Kaslow et al., 2007, p. 442). In fact, assessment influences students' learning and enables teaching through the process of examining student skills and knowledge (Ramsden, 2003). Effective assessment focuses on the skills, attitudes, and knowledge associated within and across each competency domain being measured (Kaslow et al.).

Assessment is designed to measure learning, inform students of educational goals and expectations, and offer feedback on performance (Alquraan, 2012). Alquraan found that when students were offered effective feedback related to their educational performance, the students were better able to understand their performance strengths and weaknesses and make necessary adjustments to conform to competency expectations. Similarly, Havnes (2004) found that well-developed assessment methods had a positive effect on students' achievement and therefore higher educational institutions must utilize assessment methods that enhance student learning.

Types of Assessment in Higher Education

Alquraan (2012) found that higher educational institutions commonly used traditional, performance, formative, portfolio, self-assessment, computer-based, and summative methods to assess student competence. Traditional methods of assessment include paper-and-pencil methods like: "multiple choice, true-false, matching, restricted response, fill-in-the-blank, and essay items" (p. 125). Traditional methods of assessing

student competence allow educators to gain a real-time measurement of students' exposure to the curriculum. However, traditional methods of assessment do not measure depth of learning, ability to apply concepts, or practical skills.

Performance methods of assessment also utilize faculty observation of how well a student performs a process or provides a product (Alquraan, 2012). Performance assessment is usually measured through a term paper, project, or presentation. Performance methods measure students' deeper learning and generally use a standardized assessment tool, like a rubric, to assess performance.

"Formative assessment is an ongoing, developmentally informed process with direct and thoughtful feedback during training and throughout professional development to ensure attainment of higher levels of competence through learning and performance improvement." (Kaslow et al., 2007, p. 444). Formative assessment is more personal and usually involves the educator measuring student comprehension through oral and personal communication that includes: question and answers, meetings with students, oral tests, and journaling (Alquraan, 2012). According to Alquraan, formative assessment is most effective when it is well organized and oral responses are combined with written responses.

Portfolio assessment includes students' reflections on their learning experience over time (Alquraan, 2012). Portfolios allow students to learn the expected assessment criteria and reflect on their own performance when compared to the competency standards. Portfolios can be used in many educational disciplines, provide insight into students' growth, and increase students' motivation.

Self-assessment involves students evaluating their own learning and thinking (Kaslow et al., 2007). Self-assessment encourages more active engagement by students and increases their competence, motivation, and confidence. In fact, self-assessment can illuminate areas of needed growth in knowledge, skill, attitude, and training.

Computer-based assessments provide immediate and concrete feedback on students' understanding of the materials covered (Kaslow et al., 2007). Computer-based assessments can also impact students' motivation, quickly assess their understanding, and reduce grading time for educators. Computer-based assessments provide a consistent method of evaluating students' knowledge; however, this can also be inflexible.

Summative assessment is an end point or outcome measurement (Kaslow et al., 2007). Summative assessments often involve a degree conferral after a successful internship, field placement, residency, fellowship, or student-teaching experience. The summative assessment generally includes a phase where competence has been observed over time by professionals and in a clinical setting.

Educators use various methods to assess student knowledge and competence (Alquraan, 2012). In fact, different methods of assessment provide diverse evidence of learning; therefore, multiple methods should be used to measure student progress and competence. Effective program assessment outlines students' strengths and weaknesses, provides guidance as students gain knowledge and increases their proficiencies, and utilizes remediation to screen and ensure competence is evident (Kaslow, et al., 2007).

Ramsden (2003) found that there is no assessment method that adequately measures all educational goals and objectives. Alquraan, Bsharah, and Al-bustanji (2010) found that when educators utilized various methods of assessing student competence and

offered effective feedback on performance, students were able to make favorable adjustments. In fact, progress toward achieving the program's established learning outcomes was often attained.

Assessment in Related Fields of Study

Teaching

Due to low student performance scores in the United States, the field of education grappled with how best to prepare student teacher candidates in order to ensure students' educational achievement standards were met (Bookhart, 2011). In the 1980s and 1990s the field of education experienced a standards-based reform movement. The reform began requiring assessment measures in order to prove student learning was occurring.

In 2002, No Child Left Behind (NCLB) was adopted which required states to develop outcome-based policies that would ensure accountability, a method for measuring student learning, and proof of effectiveness in teaching (Bookhart, 2011). The NCLB standards placed more pressure on higher educational institutions. In fact, NCLB required academic programs to ensure that teacher candidates were assessed and could demonstrate effective knowledge and the skills required to effectively teach in a classroom.

Portfolios are one assessment method that is widely used in higher educational programs, including teaching, nursing, and social work in order to measure student competence (Baume, 2001). Portfolios are designed to assess a students' professional development by allowing the students to provide a collection of evidence of their performance and skills that have been acquired in a clinical setting. Examples of evidence found in student-teacher candidates' portfolios include lesson plans, graded student work,

feedback from qualified professionals who have observed the student-teacher candidate in a field setting, academic essays, and reflective commentaries (Tummons, 2010). The exact types of documents submitted for a student-teacher candidate's portfolio varies based on the student-teaching site, the subject being taught, the background of the students in the classroom, and the resources available to the student-teacher candidate. Students are judged by the evidence they provide that demonstrates all performance outcomes have been satisfactorily met.

Lesson plans are often a part of each student-teacher candidates' portfolios (Tummons, 2010). Universities often provide templates for student-teacher candidates to utilize. These lesson plan templates include key features like: measurable learning outcomes, resources, details related to the students in the classroom, any variations or outside factors, assessment, and key educational skills. Lesson plan templates are designed to increase the consistency in how various faculty evaluate student-teacher candidate's lesson planning abilities.

Standardized state-mandated tests have also been developed in an effort to measure the competence of student-teacher candidates (Goodman, Arbona, & Dominguez de Rameriz, 2008). Standardized tests are designed to measure a student's knowledge of best teaching practices and the skills required in order to be an effective teacher. Standardized tests are believed to provide a valid evaluation that ensures student-teacher candidates meet the minimum qualifications required to be an effective teacher. Furthermore, universities can be held accountable for their student-teacher candidates' performance and preparedness to enter the teaching profession based on standardized test scores.

Field-based student-teaching experiences are also utilized to measure skill and performance competence of student-teacher candidates (Goodman et al., 2008). Generally, student-teaching experiences are conducted in preschool to 12th grade classrooms. Student-teacher candidates observe, assist, tutor, instruct, and occasionally conduct research in the classrooms (Capraro, Capraro, & Helfeldt, 2010).

Student-teaching is designed to bridge the gap between theory and actual practice (Capraro et al., 2010). Classroom curriculum is based on skill and knowledge attainment; however, the field experience is designed to measure the student-teacher candidate's ability to critically think and solve situational problems (Goodman et al., 2008). Evaluation of a student's overall competence is assessed in the field setting. This assessment is designed to ensure that student-teacher candidates can exhibit the skills and disposition required to be an effective teacher.

Whereas portfolios and standardized exams measure knowledge, the field experience is designed to demonstrate that student-teacher candidates can perform the necessary practitioner elements of effective teaching (Goodman et al., 2008). In fact, the National Council of Accreditation in Teacher Education (NCATE) required that educational programs utilize multiple methods of assessing student competence (Council for the Accreditation of Education Preparation, 2015). NCATE also requires that educational programs include a student-teaching observational component in their assessment of student competence.

Classroom assessment techniques (CATs) represent a common form of formative assessment utilized in education (Angelo & Cross, 1993). CATs include nine common strategies. The first CAT strategy requires students to list a pro/con grid related to a class

concept. A second CAT strategy requires students to summarize a complex concept in a one-sentence summary. A third CAT strategy utilizes application cards where students take a concept that was covered in class and apply it to real-world scenarios that they may encounter while working as a professional.

A fourth CAT strategy is self-confidence quizzes where students are asked to rate their confidence related to specific tasks (Angelo & Cross, 1993). A fifth CAT strategy utilized in education is class opinion polls which includes students offering and supporting their opinion on certain issues. A sixth CAT strategy requires students to reflect on how course materials might create everyday ethical dilemmas. Students must also explain viable solutions to these ethical dilemmas that align with professional standards and values.

A seventh CAT strategy is called the muddiest point which requires students to identify which class concepts are confusing (Angelo & Cross, 1993). Reading reaction sheets are the eighth CAT strategy that is often used in education and requires students to provide feedback based on assigned readings. Lastly, the one-minute paper is a CAT strategy that requires students to respond quickly to a set of questions related to course materials. All nine CAT strategies are designed to assist faculty in quickly assessing students' grasp and depth of the materials being covered in class.

Nursing

High demand is placed on academic institutions to ensure that nursing students have competent knowledge, clinical skills, and practice behaviors upon graduation (Cant, McKenna, & Cooper, 2013). In fact, the National Council of State Boards of Nursing (1996) (NCSBN) formally defined competence as, "the application of knowledge and the

interpersonal, decision-making, and psychomotor skills expected for the practice role, within the context of public health, safety, and welfare" (p. 5). Graduates from nursing programs must meet minimum standards of practice behaviors that are established by their university in accordance with the Council on Certified Nursing Education (CCNE). Graduates from nursing programs must also successfully pass state boards as well as the National Council Licensure Examination for all registered nurses (Klein & Fowles, 2009).

According to Lakanmaa et al. (2014) assessment of student competence in nursing education must be based on a holistic concept of competence and within the context it is being practiced and used. Furthermore, multiple methods of assessment are needed to ensure validity and to guarantee a comprehensive evaluation of the students' skills were reviewed from various assessment sources. Numerous methods of assessment are used in order to evaluate nursing student competence: portfolios, continuing education units, exams, direct observation of the students in a clinical setting, peer review, simulations, patient outcomes from clinical rounding, and self-assessment (Müller, 2012).

Summative assessments that are based on standards, goals, and professional criteria are utilized to provide evidence of students' skill and knowledge (Löfmark & Thorell-Ekstrand, 2014). Formative assessments identify the gap between the expected standard and the students' actual performance and areas of needed improvement. Formative assessments should deepen learning, motivate the student, and encourage students' self-regulated and self-assessed learning. In fact, self-assessment is seen as a way to measure a student's ability to own their educational progress.

Over the last decade, nursing programs have begun utilizing Objective Structured Clinical Examinations (OSCE) in an effort to objectively measure student competence (Cant et al., 2013). OSCE are standardized checklists that trained professionals utilize to evaluate a student's skill within a clinical setting. OSCE are often utilized in clinical simulation-based learning environments and are designed to eliminate subjectivity when assessing students' performance. OSCE settings usually include various skill stations where a student is required to perform a certain number of clinical tasks within a specific time frame.

OSCE have active and passive simulation components (Cant et al., 2013). Passive simulation stations generally require students to provide written, short-answer responses to specific nursing scenarios. Passive simulations typically assess core nursing skills, medication calculations, charting, or interpretation of medical testing results. OSCE active simulations involve students performing hands-on skills and participating in a series of role-plays in order to demonstrate mastery of applied skills when placed into hypothetical scenarios.

OSCE use a predetermined objective checklist in order to evaluate students' knowledge, practice skills, decision-making, critical thinking, and communication skills (Cato, Lasater, & Peeples, 2009). Simulations also involve some students performing a task while other nursing students observe. Following the simulation experience, the group of students who observed the simulation discuss the case, the team's care of the patient, safe practices, priority setting, use of continuous assessment of the patient, communication, leadership, clinical judgment, and effective use of resources.

Nursing education often uses multiple methods to assess overall student competence (Cant et al., 2013). OSCE is the most common; however, The Recorded Assessment (RA) and the Structured Observation and Assessment of Practice (SOAP) are two additional methods that are commonly used to ensure nursing students are competent to enter professional practice. The RA is generally utilized in the first year of a nursing student's educational program and involves the students being videotaped while they perform clinical tasks in a simulation setting. Students then watch their own performance and provide a written self-critique.

The SOAP assessment is generally utilized with senior-level students prior to graduation (Cant et al., 2013). The SOAP assessment includes a one-day clinical exam where a trained professional observes the students' performance in a practice setting for approximately two to three hours. The students' performance skills are mapped against the national competency standards. The students are then included in a reflective feedback session where strengths and deficits are reviewed.

Portfolios are also used to evaluate nursing students' clinical competence (Yanhua & Watson, 2011). Students are required to create and submit a collection of evidence demonstrating their clinical and academic nursing work. Portfolios are reviewed by an educator and feedback is provided to the students. Portfolios are seen as an effective tool to promote active learning, create individual accountability, and develop critical-thinking skills.

Another method that is used in nursing education to evaluate student competence is the Clinical Competence Questionnaire (CCQ) (Liou & Cheng, 2014). The CCQ measures upcoming baccalaureate nursing students' self-perceptions of their clinical

competence. The CCQ is based on Patricia Benner's *From Novice to Expert* model that evaluates students' self-perceptions of competence as they move through five phases of education and skill development: novice, advanced beginner, competent, proficient, and expert. The CCQ is designed to assess a student's knowledge, clinical skills, clinical reasoning and judgment, and professional behavior.

Nursing education is invested in ensuring students can perform with proficiency, competency, safety, and excellence (Karabacak, Serbest, Öntürk, Aslan, & Olgun, 2013). In fact, utilizing simulation labs and clinical practice settings are a key method of assessing students' skill and self-confidence. Karabacak et al. found that student performance is highly linked to students' self-confidence, also known as self-efficacy. Karabacak et al. stated that "self-efficacy is related to successful performance and serves as a theoretical basis for skills development in students, which leads to increased motivation and the confidence to provide patient care in complex situations." (p. 125). Improving nursing students' self-confidence is a desirable educational outcome that is achieved in four specific ways within simulation and practice settings.

First, successful performance in simulations and practice settings increases students' self-efficacy, while unsuccessful performances result in a reduction in students' self-confidence (Karabacak et al., 2013). Second, observing successful skill performance can increase students' self-efficacy. In other words, if a student can observe another student successfully performing a nursing skill, the student can then assume that they too are able to successfully perform the same task. Verbal support is the third technique used in nursing education in order to increase students' self-efficacy. When the students' performance is verbally reinforced by a trained professional, the students gain confidence

in their ability to perform competent nursing skills. Finally, students learn that they are able to effectively manage their own psychological reactions when they are placed into stressful settings; therefore, assessments conducted in simulation or practice settings are a key method of ensuring nursing students are confident and competent to practice professionally.

Social Work

David McClelland (1973), argued that exams and school grades were not effective ways of measuring student competence. McClelland proposed that there were five rules that should be applied when attempting to measure an individual's educational competence. First, assessment of competence should be evaluated in clusters of learning outcomes and in real-world settings. Second, evaluators needed to test the validity of their measurement tool against real-life scenarios. Third, evaluating a student's competence must include spontaneous, unexpected, and complex events in order to assess the student's ability to apply context and critical thinking. Fourth, the desired outcomes should be made transparent to both the student and the teacher, so that changes and growth can be observed. Finally, multiple measures and methods of assessment need to be utilized to accurately assess student competence. Social work education generally adheres to each of McClelland's five assessment criterion guidelines for measuring student competence (Drisko, 2014).

Similar to other helping professions, social work education has moved toward competency-based assessment in order to ensure that students are equipped and able to meet the professional standards outlined by their accrediting body (Chamiec-Case, 2013). Institutions of higher learning are required to ensure: students are prepared to provide

high quality services prior to entering their profession; the institution's learning outcomes are transparent and available to the public; and, cost-effective methods are being utilized, so that resources are maximized. In fact, the Council on Social Work Education (CSWE) created the Educational and Policy Accreditation Standards (EPAS) to ensure social work programs could show evidence that their students were achieving proficiency in 13 core competencies (2.1.1-2.1.10d) and 41 specific practice behaviors (Council on Social Work Education, 2008).

According to Drisko (2014), "It is important to note that social workers identify competence as a core professional value."(p. 416). For social workers, competence is seen as knowledge, values, and skills that must be demonstrated in order to be an effective professional. Similar to education and nursing, social work education also utilizes formative and summative assessment tools (Kealey, 2010).

The goal of formative assessment in social work education is to "foster learning and understanding through ongoing monitoring of acquired skills in order to determine steps needed to achieve learning objectives." (Kealey, 2010, p. 66). According to Kealey, formative assessment is beneficial to students and instructors. For instructors, formative assessment can provide feedback related to effectiveness of the instructor's teaching style and indicate when adaptations are needed. Formative assessment is beneficial for social work students because it offers shared responsibility for learning outcomes, allows for guidance throughout the educational process, and models an effective learning procedure that students can use in their future work with clients.

Formative assessments can be individualized or geared toward a group of social work students where the goal of the assessment should determine which method of

evaluation is used (Kealey, 2010). Furthermore, learning objectives should be clearly stated in advance and social work students should receive adequate feedback in order to learn, adapt, and strengthen their skill in a particular area of practice. Methods of formative assessment that are often used in social work educational programs include: quizzes, in-class discussions, group-work assignments, and feedback offered on assignments and portfolios.

Crisp and Lister (2002) outlined 11 summative methods of assessment that are commonly used in social work education to measure student learning and competence. First, coursework assignments are the most common form of summative assessment used in social work education and involve students working individually and in groups on various projects in order to demonstrate understanding of course material. Second, critical incident analysis is utilized in social work education and requires students to analyze important events in a client's life in order to increase the students' understanding of how critical life events impact client decisions, options, and viable resources. Essays and examinations are two other forms of summative assessment commonly utilized in social work education.

Journals are another method of summative assessment utilized in social work education (Crisp & Lister, 2002). Often students are encouraged to explore their feelings, describe theories related to diversity, and correlate educational concepts to real-life scenarios during journaling. Students are encouraged to express their actual feelings, so that issues of prejudice, oppression, and discrimination can be explored and potentially reshaped.

Portfolios and presentations are two more common summative methods used to assess student competence in social work education (Crisp & Lister, 2002). Portfolios provide a collection of evidence that demonstrates student's learning related to a specific topic. Presentations can include oral reports, field trip displays, PowerPoint presentations, and community simulations where students demonstrate mastery of a particular topic (Gutierrez & Alvarez, 2000).

Proposals are an eighth method of summative assessment used in social work education (Crisp & Lister, 2002). Proposals require students to research and describe a specific social problem. Proposals can lead to community action or simply be utilized as a stand-alone project. Proposals are useful in assessing social work students' ability to consider and incorporate multiple perspectives prior to intervention. Reports of work undertaken are another form of summative assessment where social work students combine research, practice, and interventions they have conducted within a clinical setting.

Self-assessment is another common form of summative evaluation utilized in social work education to assess student competence (Crisp & Lister, 2002). Summative self-assessment involves students completing structured instruments provided by faculty or student-designed instruments, like diaries or learning logs. Self-assessment tools are designed to evaluate social work students' ability to assess their critical thinking, assess their own performance, and to evaluate what they have learned.

Standardized exams are another summative method that is used in social work education programs to assess students' comprehensive knowledge prior to graduation (Crisp & Lister, 2002; Drisko, 2014). Social work students can take two standardized

exams that are designed to demonstrate student competency and to allow educational programs to prove successful educational outcomes (Drisko). The first exam is the Area Concentration Achievement Test (ACAT). The ACAT has three versions (A, B, and C). A- and C-versions are 120-minutes and can be taken using paper and pencil or online. The B-version is 60-minutes. The second standardized exam available in social work education is the Foundation Curriculum Assessment Instrument (FCAI) that consists of 64-multiple choice questions (Drisko, 2014). Unfortunately the ACAT and FCAI exams both fail to test students over all 13 areas of core competence required by the Council on Social Work Education; therefore, it is uncommon for social work educational programs to require students to take either of these exams in order to show educational program outcomes.

Another method that is commonly used in social work educational programs to measure competence is pretests and posttests (Drisko, 2014). At the beginning of a course, a pretest is completed by social work students. The pretest is designed to allow students to assess their knowledge and performance related to topics that will be covered in the course. At the end of the course, a posttest is completed by the social work students. The posttest has the same information as the pretest and is designed to capture any growth related to the students' knowledge or performance that can be attributed to the course. Value-added assessments, like pretests and posttests, are commonly used to evaluate social work education program effectiveness.

Capstone projects are also utilized by social work programs to assess student competence (Drisko, 2014). Capstone projects might include practice projects, a thesis, or other multifaceted opportunities for learners. An ideal capstone project includes

demonstration of several clearly identified competencies or their components. Measures for assessing capstones should identify each competency and provide clear standards for appraisal.

Similar to other educational programs like: medicine, law, engineering, clergy, education, and nursing, the field of social work has also developed a specific signature pedagogy (Boitel & Fromm, 2014). In 2008, the CSWE determined that field education was the signature pedagogy for social work education. This designation by the CSWE meant that clinical sites would be the synthetic, integrative curricular arena where classroom knowledge would be displayed in a practical setting and where students would be socialized to the profession.

Field education requires a learning contract that is developed with the student and a field instructor, who is a social work professional (Boitel & Fromm, 2014). All 13 areas of competence and 41 practice behaviors, defined by the CSWE, must be addressed in the learning contract and demonstrated by the student (Council on Social Work Education, 2008). The field instructor observes and evaluates the student's performance and provides an evaluation to the social work faculty, often at a midpoint and the conclusion of the field experience. Feedback is provided to the student during required weekly supervision with the qualified field instructor (Petracchi & Zastrow, 2010). The field evaluations are also reviewed with the student so that strengths and areas of needed improvement can be identified and developed.

During institutional program review, the CSWE requires social work programs to provide field instructors' assessment of student competence and one other form of assessment data to prove program effectiveness (Council on Social Work Education,

2008). The CSWE reports that faculty assessment is the most common type of secondary data source that social work programs provide the CSWE to demonstrate students' competence. Students' self-assessment is the second most common data source that social work programs provide the CSWE during accreditation program reviews (Council on Social Work Education).

Studies Examining Field Instructor Assessment

There are multiple methods of assessment utilized in higher educational programs in order to evaluate student competence prior to graduation. In social work, the three most common forms of assessment utilized by accredited programs are faculty assessment, field instructor assessment, and students' self-assessment (Council on Social Work Education, 2008). This literature review explored research studies that outlined the reliability and consistency of faculty, field instructor, and students' self-assessment. This literature review also outlined research studies where two or more types of assessment were compared, in order to determine if one method was more reliable than another. Lastly, this literature review demonstrated that there were no previous research studies that compared how field instructors, faculty, and students assessed students' competence related to the CSWE's 13 core competencies across three academic years.

Studies Supporting Field Instructor Assessment

The impact of assessing student performance in a clinical setting was studied in nursing, education, psychiatry, counseling, and social work programs as a means of gauging student knowledge and practice-skills (Bahous & Nabhani, 2011; Bennett, Mohr, Deal, & Hwang, 2012; Bogo et al., 2004; Bogo, Regehr, Power, & Regehr, 2007; Bogo et al., 2006; Hipolito-Delgado, Cook, Avrus, & Bonham, 2011; Long, 2014; Marrero et al.,

2013; Mathiesen & Hohman, 2013; Peleg-Oren, Macgowen, & Even-Zahav, 2007; Rogers & McDonald, 1995; Sussman, et al., 2014; Vinton & Wilke, 2011; Wiechelt & Ting, 2012). Some researchers found that immersing students into a field setting was beneficial and deepened students' learning and enhanced their professional skills (Bennett et al.; Bogo et al., 2004; Hipolito-Delgado et al.; Long; Marrero et al.). However, other researchers found discrepancies in field instructors' ability to effectively measure students' competence (Bahous & Nabhani; Bogo et al., 2006; Bogo et al., 2007; Mathiesen & Hohman; Rogers & McDonald; Peleg-Oren et al.; Sussman et al.; Vinton & Wilke; Wiechelt & Ting).

Bennett et al. (2012) conducted a pretest-posttest follow-up control group study in order to research the supervisory relationship between field instructors and social work students in field placement settings. Bennett et al. evaluated whether a student's positive emotion about supervision would equal a positive attachment with the field instructor. Bennett et al. also evaluated whether a negative emotion about supervision would equal a negative supervisory alliance. For example, if the field instructor exhibited an anxious or avoidant attachment to the student, would those attachment styles result in a negative perception about supervision? Bennett et al. found four relevant conclusions. First, when a student had positive emotions related to supervision, the student also perceived a positive alliance with the field instructor. Second, when a student had feelings of anxiety or avoidance toward supervision, those feelings did not negatively impact the perceived supervisory alliance. Third, field instructors who exhibited high levels of anxiety at the beginning of the study also exhibited the highest negative emotions at the end of the study. Finally, field instructors who utilized avoidant attachment styles in supervision

were not perceived negatively by students. Field experience is the signature pedagogy for assessing social work student competence (Council on Social Work Education, 2008). Bennett et al. demonstrated that field experience was not impacted by attachment styles or perceptions of supervision. Bennett et al. provided research that helped to support field instruction as a reliable third party assessment of social work student competence.

In the field of psychiatry, Marrero et al. (2013) conducted a quantitative study in order to assess the core competencies of professionalism in psychiatric residency education. Students completed a 149-item questionnaire, using a nine-point Likert scale, in order to assess their attitudes related to the training they received about professionalism, ethics, preparation, and evaluation in a field setting. Marrero et al. found that students strongly agreed that supervision in a clinical setting was an appropriate method of assessing professionalism. Furthermore, students strongly favored professionals observing the students' interactions with team members and patients in a clinical setting in order to assess professionalism. Marrero et al. reported that direct faculty supervision was valuable as it was generally direct and straightforward, offered the opportunity to evaluate students in real-life scenarios, and allowed for immediate feedback. However, Marrero et al. also warned that direct faculty assessment could be skewed since students knew they are being observed. Marrero et al. suggested that direct faculty observation should be paired with a structured assessment tool in order to provide greater reliability.

In the field of nursing, Long (2014) conducted a mixed methods study in order to investigate the impact of a two-week international immersion program on nursing students' cultural competence. Long allowed 17 student volunteers, from the same

college nursing program, to participate in a 14-day immersion international experience in Belize. Similarly, Long developed a control group of 17 nursing students from the same program, who engaged in a two-week field experience within a local community agency. All of the nursing students in the study completed the Cultural Self-Efficacy Scale prior to the two-week experience and again at the end of their immersion field experience. Throughout the two-week immersion, the students completed daily journal entries that were later examined and coded for themes. Long found that students reported a wide variance in their perception of the culturally competent education they had received. In fact, four students reported they had never received education related to cultural competence during their nursing program. Long also found that immersion in a specific culture significantly improved students' confidence, skills, and awareness. His study confirmed the importance of placing students into field experience settings in order to improve cultural competence, awareness, and professional skills. Long's study also demonstrated that students reported greater educational outcomes when placed into field settings versus classroom settings.

Similarly, Hipolito-Delgado et al. (2011) conducted a qualitative narrative analysis where three specific graduate-level counseling students were immersed in a multicultural setting in order to investigate whether immersion increased the students' knowledge, awareness, and skills related to cultural competence. The Multicultural Action Project (MAP) was a 16-week experience where students identified a community that was culturally different than their own, based on race, ethnicity, gender, sexual orientation, ability, or age. Students then created an action plan for achieving emotional, educational, and professional goals within the community. Students wrote in journals to

record their experience and submitted 18-21 page journals at the end of the semester. Hipolito-Delgado et al. discovered that one student, who chose to volunteer at a homeless shelter, gained insight into her previously unknown fear of being a female in a predominantly male environment Another student, who chose to volunteer in a prison with incarcerated females, discovered she could move beyond her feelings of powerlessness and anxiety and gain self-confidence. The last student, who chose to volunteer with older adults at a local nursing home, gained insight into how discrimination occurs with the elderly and how the elderly can feel like a burden. Hipolito-Delgagdo et al. demonstrated that immersion in another culture developed greater insight and increased awareness. Social work field placement is similar to the MAP cultural immersion experience where students are expected to gain insight, increase self-awareness, and demonstrate professional competence and growth while immersed in a field placement clinical experience.

In the related field of teacher education, Bahous and Nabhani (2011) conducted a study in a private university in order to assess the learning outcomes of a teacher preparation program in Lebanon. The educational program was designed to meet all North American accrediting standards, due to a lack of established standards in Lebanon. Bahous and Nabhani elicited feedback from student-teachers, using journaling, and compared the educational program's expected learning outcomes to the students' perceptions of what they had learned during their educational program. More specifically, Bahous and Nabhani evaluated student-teachers' perceptions of the following three areas: reflective journal writing as an effective strategy to facilitate growth of a student's skills, evidence of knowledge gained related to the program's educational goals, and the

development of positive attitudes about teaching by participating in field experience. Bahous and Nabhani conducted an exploratory qualitative study with 43 bachelor-level student-teachers who were all in their final year of college. The curriculum of their senior year involved observation in a classroom, a 180-hour internship, practice teaching in classes, and seminars, spread over 15 weeks. Seminars were designed for students to reflect upon their field experiences, using journaling and reflection. Journals were reviewed weekly.

Bahous and Nabhani (2011) found that reflective writing was an effective method of facilitating growth. In fact, students reported journaling as an effective strategy to reflect about their work, demonstrate growth, remember details, recognize strengths and weaknesses, improve organizational skills, shift knowledge from short-term to long-term memory, and increase confidence. Similarly, Bahous and Nabhani found that knowledge related to learning outcomes was achieved. In fact, content knowledge, curriculum information, learning principles, disciplinary methods, approaches, learning styles, and theories were all discussed in student journals. Furthermore, Bahous and Nabhani found that attitudes about teaching were positively affected during the field experience. More specifically, students reported developing leadership skills, shaping their character, learning discipline, gaining new perspectives, increasing their interest in teaching, developing a positive attitude toward children and the process of learning, and a greater appreciation of respect. Bahous and Nabhani's research supported the importance of faculty assessment as well as field experience for bachelor-level students. In fact, Bahous and Nabhani found that practice in a field setting enhanced knowledge that was taught in the classroom and field experience validated educational learning outcomes.

Bogo et al. (2004) conducted a study in order to assess the reliability of field instructors' assessment of social work students. Experienced field instructors watched vignettes and rated students' performance using the same assessment tool. Bogo et al. found that experienced field instructors were remarkably consistent in their ability to recognize and categorize students' performance accurately according to the skill and knowledge level that had been assigned to each particular vignette. Bogo et al. found that even though field experience was diverse in nature, experienced field instructors were consistently able to accurately assess student competence and readiness for practice.

Studies That Did Not Support Field Instructor Assessment

There were several studies that did not support field assessment as a valid method of evaluating student competence. For example, Vinton and Wilke (2011) tested the leniency bias exhibited by social work field instructors who were assessing student competence when comparing two methods of assessment: face-to-face and anonymous. For the face-to-face portion, field instructors were required to share their feedback with the students they were assessing. For the anonymous assessment, field instructors did not share their evaluation with the students they observed. Vinton and Wilke found that field instructors provided consistently higher ratings when evaluating a student face-to-face versus anonymously, which suggested that student assessment of competence was impacted and even skewed more positively when field instructors were required to discuss their evaluation with the students they assessed.

Wiechelt and Ting (2012) conducted a mixed methods exploratory study in order to examine how Bachelor of Social Work (BSW) field instructors perceived and utilized evidence-based practice (EBP) in students' field experiences, given that EBP was an

expectation of social work professionals. A total of 17 BSW field instructors, who had students currently in field placement, attended a three-hour workshop focused on methods of infusing EBP into field practice for students at the University of Maryland. The field instructors also completed a 26-item questionnaire and participated in a focus group discussion to assess their beliefs, experience, and perceptions of EBP in field settings. Wiechelt and Ting found that field instructors felt positive about EBP; however they also admitted that EBP occurred inconsistently, if at all, during field experience. Wiechelt and Ting's finding were concerning given that field instruction is the preferred method of assessing student competence and the use of EBP is expected; however, EBP was not consistently modeled for students by the professionals who were monitoring their field experience.

Similarly, Mathiesen and Hohman (2013) conducted a quantitative study in order to adapt and revalidate the Knowledge Attitude and Behavior (KAB) instrument, previously used with medical students, in order to measure social work students' knowledge, attitudes, and use of evidence-based practice (EBP) skills. The KAB was previously validated with undergraduate medical students; however, questions were modified to reflect the field of social work. The KAB-Social Work (KAB-SW) questionnaire was completed by 134 graduate and undergraduate social work students and 50 field instructors. Mathiesen and Hohman found that all participants had strong intentions to use EBP in field settings; however, undergraduate students and field instructors rated the use and knowledge of EBP significantly lower than graduate

students. Inconsistent use of EBP in field placements was concerning given that field instruction is the preferred method of assessing student competence, yet field instructors admitted to fragmented or even non-existent use of EBP in field settings.

Furthermore, Bogo et al. (2006) conducted a qualitative study in order to discover how experienced field instructors assessed social work student competence. Bogo et al. found that students' personal qualities impacted field instructors' perceptions of student competence. For example, students who were mature, demonstrated initiative, displayed energy, were responsive, and able to work independently were often rated higher on field evaluations that were designed to assess skill, knowledge, and competence. In fact, when mature and motivated students struggled with a particular task, the performance was couched within the larger context of the student's success. Similarly, when students' personal attributes were not seen favorably by the field instructor, that perception impacted the overall evaluation of a student's competence related to social work practice. Bogo et al. found that field instructors' general opinion of a student overrode their opinion of a student's specific skills, which was not the design or intention of assessment in field instruction.

Peleg-Oren et al. (2007) conducted a study in order to assess field instructors' commitment to student supervision in social work programs. Peleg-Owen et al. used the Investment Model questionnaire in order to assess field instructors' perceptions of the duties, responsibility, and commitment level related to monitoring social work students who were in field placements within their agencies. Interestingly, Peleg-Oren et al. found that when field instructors were given higher rewards, had greater investment in their agency, and higher job satisfaction they were more committed to the field supervision

experience. Peleg-Oren et al. warned that burnout could occur with ideal field instructors and could lead agencies to utilize less committed employees as field supervisors for social work students. Utilizing less committed field instructors in order to protect more qualified professionals from burnout could negatively affect the level of supervision students were receiving in field placement.

In related research, Rogers and McDonald (1995) conducted a study in order to examine what methods of instruction field supervisors utilized in order to ensure that social work students' skill and knowledge could be accurately assessed in field settings. Rogers and McDonald found that field instructors taught students most often from the mindset of expedience and getting the work done, rather than selecting specific teaching methods for educative purposes. Rogers and McDonald warned that field instructors taught students, who are future social work professionals, to value speed and the completion of tasks rather than the social work values, competencies, and required practice behaviors. Furthermore, Rogers and McDonald warned that unless universities worked closely with field instructors, workload demands often dictated the overall field experience versus purposeful instruction designed to teach and assess student competence.

Sussman et al. (2014) conducted a qualitative study in order to examine what criteria BSW field instructors used in order to measure student competence, suitability for the field of social work, and students' readiness for entry-level practice. Field instructors who participated in the qualitative study had professional experience that ranged from one to 14 years, with an average of eight years' experience in BSW field instruction. Sussman et al. assessed field instructors' perceptions of how best to measure a student's

readiness for entry-level social work practice. Sussman et al. found that field instructors were evaluating BSW students on their ability to see the big picture, identify meanings behind client interactions, and process their own emotions. Sussman et al. also found that a student's communication skills and maturity could positively or negatively impact a field instructor's perception of whether a student was prepared for entry-level social work practice. Sussman et al. found that ultimately field instructors evaluated BSW students' performance in a clinical setting based on their ability to grow and change versus their social work knowledge, which suggested subjective versus objective measurement of skill.

In conclusion, Bogo et al. (2007) conducted a qualitative study in order to assess if the values inherent in the social work profession were counterproductive to the skills field instructors were required to assess related to social work student competence. Bogo et al. found that social workers were trained to respect diversity, focus on the strengths of individuals, advocate and empower vulnerable populations, and utilize relationships as a means to develop and grow. According to Bogo et al., those same skills hindered the field instructors' ability to provide students with negative feedback and evaluations. Rather than terminate a student in their final semester of education, field instructors could erroneously support, advocate, empower, protect, and utilize their relationship to develop the student, rather than admit that there might be an ill-fit for that student in the social work profession. Bogo et al. cautioned that this collision of values could prevent accurate field instructor assessments of student competence.

Studies Examining Faculty Assessment

Studies Supporting Faculty Assessment

Nursing, education, psychology, and social work have offered various research studies designed to examine faculty assessment of student competence in higher education (Alquraan et al., 2010; Davidovitch & Soen, 2011; Geisinger, 1980; Gockel & Burton, 2014; Güvendir, 2014; Holmes & Smith, 2003; Jeffreys & Dogan, 2013; Komarraju, 2013; Macgowen & Vakharia, 2012; Nasrallah, 2014). Some researchers found that faculty assessment was a valuable and reliable method of measuring student competence (Alquraan et al.; Davidovitch & Soen; Gockel & Burton; Jeffreys & Dogan; Komarraju; Macgowen & Vakharia). However, other researchers found discrepancies in faculty assessment of students' competence (Geisinger; Güvendir; Holmes & Smith; Nasrallah).

In nursing education, Jeffreys and Dogan (2013) found that faculty assessment strengthened educational programs and provided an evaluation of students' cultural competence. Jeffreys and Dogan conducted a quantitative study in order to evaluate a tool designed to measure and develop cultural competence in nursing students. Jeffreys and Dogan developed the Cultural Competence Clinical Evaluation Tool (CCCET) in a student-version (SV) and teacher-version (TV). All 161 nursing students enrolled in a final practicum course completed the CCCET-SV. Clinical instructors completed two assessments: the CCCET-TV and the Clinical Setting Assessment Tool-Diversity and Disparity (CSAT-DD) for all students enrolled in their practicum groups. Jeffreys and Dogan discovered consistency between students' and teachers' responses. Jeffreys and Dogan's research also validated the benefits of assessing student competence between

and within educational courses. Social work education assesses students' levels of cultural competence. In fact, faculty assessment provides an evaluation of student competence between and within courses, as suggested by Jeffreys and Dogan's research.

Alquraan et al. (2010) investigated the relationship between the type of assessment method faculty used in higher education and the level of feedback the faculty offered undergraduate students. Alquraan et al. found that when professors utilized various methods of assessment, specifically oral and written comments, the professors tended to offer students more feedback. In fact, Alquraan et al. suggested that faculty should use various methods of assessing student competence as well as utilizing different types of feedback in order to enhance student development and learning.

Davidovitch and Soen (2011) evaluated end of course surveys that were completed by students in order to examine the teaching effectiveness of 534 faculty instructors. Students rated faculty on the following items: clarity of lectures, encouragement to ask questions, attitudes toward students, and correspondence outside of class. Davidovitch and Soen were concerned that requiring students to assess faculty effectiveness, rather than allowing students to participate voluntarily, would negatively impact the students' end of course surveys. Davidovitch and Soen found that student feedback was not impacted negatively when students were required to participate. Furthermore, Davidovitch and Soen found that student feedback was effective and valuable in shaping faculty practice and delivery in higher education. In fact, requiring students to provide end of course evaluations assisted faculty in partnering with students and empowered a reciprocal relationship where both parties offered comments designed to enhance practice and learning.

Furthermore, Gockel and Burton (2014) conducted a study to assess whether practice classes taught in social work education developed and maintained the counseling skills required in the social work profession. Gockel and Burton found that professors were effective in assisting students in gaining empathy, increasing students' self-efficacy related to counseling skills, and reducing students' anxiety when working with clients. In fact, Gockel and Burton found that the skills taught by faculty were sustained for at least three months and assisted students as they moved into their field experience within a clinical setting.

Komarraju (2013) explored if there were differences in undergraduate students' self-efficacy and motivation depending on the traits of the faculty who were teaching their courses. He utilized the Teaching Behavior Checklist, the Academic Motivation Scale, and the Academic Self-Concept scale in order to determine if there were specific teacher traits that positively or negatively impacted student confidence and motivation. Komarraju found that students had perceptions associated with the *ideal professor* which included accessibility, being personable, creating a comfortable learning environment, using a variety of teaching methods to deliver curriculum, and the ability to offer and accept feedback. He collected data from 261 undergraduate students from a Midwestern university who were mainly psychology students. Interestingly, Komarraju found that students who were extrinsically motivated and sought to prove their intelligence strongly endorsed the caring traits in professors. Conversely, students who were intrinsically motivated, self-assured, and self-sufficient were less concerned if their professor was caring and instead preferred professional traits like confidence, knowledgeable, prepared,

respectful, and effectiveness in managing class time. Komarraju's study confirmed the importance of faculty utilizing various methods of engaging and evaluating student performance.

Finally, Macgowen and Vakharia (2012) conducted a mixed-methods study with 123 baccalaureate-level and masters-level social work students in order to determine if students gained mastery of group-work skills during coursework. Macgowen and Vakharia utilized the Standards for Social Work Practice with Groups form to assess student competence at the beginning and at the end of the practice course. Macgowen and Vakharia found that student anxiety was reduced and confidence was increased through the use of role-plays and case scenarios within the course. Furthermore, faculty ratings related to student skills in group work also reflected improvement. Macgowen and Vakharia's study demonstrated that student confidence and skill could improve during coursework facilitated and evaluated by faculty.

Studies That Did Not Support Faculty Assessment

There are several studies that did not support faculty assessment as a valid method of evaluating student competence (Geisinger, 1980; Güvendir, 2014; Holmes & Smith, 2003; Nasrallah, 2014). Geisinger assessed grading practices among 336 faculty members at a large, eastern university. The professors completed the Faculty Orientation toward Grading Inventory (FOG) that measured professors' attitudes toward grading. Faculty also completed the Faculty Description Inventory (FDI) that captured a professor's instructional approach and typical assessment strategies utilized to measure student competence. Student grades were retrieved from the Registrar's database and compared to the FOG and FDI data.

Geisinger (1980) found that faculty grading was consistent over time. Furthermore, faculty who grade students based on the student's individual achievement, rather than compared to a larger sample of students, tended to give higher grades. Conversely, Geisinger found that faculty who compared individual student performance against a norm group tended to grade students lower. Furthermore, he discovered that faculty who had poor attitudes toward grading in general tended to use more norm-group based grading, resulting in lower student scores. Conversely, faculty who had better attitudes related to grading and utilized various methods of assessing student skill tended to give students higher grades. According to Geisinger's findings, using various assessment methods could lead to higher or inflated grading of students' performance.

Güvendir (2014) conducted a study where 419 education and nursing students, who were in their final year of college, completed a faculty member evaluation form in order to determine which characteristics students valued most in professors. He found that students preferred professors who were approachable, reliable and humble, dealt politely with students, showed respect, engaged in close relationships with students, and were supportive and motivated. Above all else, students valued professors who engaged in interpersonal relationships. In fact, this relational bond was seen as valuable in developing students academically as well as socially and emotionally. Furthermore, students reported that the ideal faculty member was objective, but generous, in their grading. Güvendir's study outlined students' expectations that professors engage interpersonally with their students. Possessing relational attributes might help faculty seem approachable to students; however, engaging in interpersonal relationships with students also had the potential to bias and impact professors' assessment of student skill.

In an effort to compare faculty grading methods and student perceptions related to grading, Holmes and Smith (2003) asked 2,979 business students to complete the following sentence: "It really irritates me when an instructor grades my paper and…" The student feedback centered around two main categories of fairness and inadequate feedback. Students often felt that objectives were not clearly explained, points were taken for small errors, little or inadequate constructive comments were provided, objective measures like rubrics were not used, and opinions versus fact were incorporated into grading. Holmes and Smith's study validated the need for consistent and objective grading tools that provided students with concrete feedback designed to develop and improve the students' skills and performance.

Nasrallah (2014) conducted a qualitative multi-case study in order to examine how faculty and students perceived effective teaching and curricular alignment. He interviewed 52 professors from four private universities. Nasrallah later observed 38 of those same professors while they were teaching and conducted a focus group discussion with 15 of the 52 professors. In addition, he interviewed 18 students in order to compare student observations with faculty perceptions of teaching effectiveness. Nasrallah found that professors and students were vague in their understanding of educational learning outcomes and objectives. He also found that summative assessments were most often utilized and that exams were created without any reference to learning outcomes. Nasrallah described the importance of universities orienting new faculty to the expectations prescribed by the university as well as accrediting bodies. More specifically, he described the importance of new faculty being trained on designing courses, writing syllabi that align with measureable assessment goals, and offering practical, lifelong

learning to students. Nasrallah determined that university undermined the quality of higher education when they failure to ensure faculty delivered and assessed quality learning objectives.

Studies Examining Students' Self-Assessment

Studies Supporting Students' Self-Assessment

Nursing, education, medicine, healthcare, and social work conducted studies designed to examine the effectiveness of students' self-assessment of competence in higher education (Achcaoucaou et al., 2014; Chan, Lam, & Yeung, 2013; Cheng & Liou, 2013; Choi & Bakken, 2013; Cole, 2009; Ćukušić, Garača, & Jadrić, 2014; Dearnley & Meddings, 2007; Dunagan, Kimble, Gunby, & Andrews, 2014; Jenner et al., 2006; Kurnaz & Çimer, 2010; Lakanmaa et al., 2014; O'Boyle, Henly, & Larson, 2001; Plant, Corden, Mourad, O'Brien & van Schaik, 2013; Rawlings, 2012; Ward et al., 2003). Some researchers found that students' self-assessment was a valuable and reliable method of measuring student competence (Achcaoucaou et al.; Chan et al.; Ćukušić et al.; Dearnley & Meddings; Kurnaz & Çimer; Plant et al.; Ward et al.) However, other researchers found discrepancies in the reliability of students' self-assessment of competence (Cheng & Liou; Choi & Bakken; Cole; Dunagan et al.; Jenner et al.; Lakanmaa et al.; O'Boyle et al.; Rawlings).

Ward et al. (2003) conducted a comparative study in order to investigate whether students' self-assessment could be improved through self-observation. Ward et al. asked surgical experts to watch multiple videos of laparoscopic surgeries and to select four benchmark videos that represented expert, gold standard, average, and poor skill levels. The surgical students then viewed the expert-level video and were filmed while they

performed laparoscopic surgery on an anesthetized pig. Surgical experts viewed the students' anonymous surgical videos and completed the Global Rating Scale (GRS) and Operative Component Rating Scale (OCRS) in order to evaluate the students' videotaped surgical skills. Students also completed the GRS and OCRS three times: immediately following surgery, after watching their own videotaped performance, and again after watching the four benchmark videos. Comparisons were correlated between the student's self-assessments of their surgical skills and compared with the scores provided by the experts. Ward et al. found that the students were reliable when rating strong versus weak surgical performances. Furthermore, surgical students provided accurate self-assessment of their skills, abilities, and technical performance, especially after viewing their own performance on video. Ward et al. found that students were able to accurately self-assess competence, especially when they could view their own performance. If applied to social work education, Ward's et al. findings suggested that students could benefit from videotaping and reviewing their own performance prior to offering a self-assessment of competence.

Chan et al. (2013) conducted a qualitative study in order to assess nursing and social work students' perceptions of competence related to inter-professional collaboration. Fifty-five students attended two seminars where they reflected on their personal reasons for choosing their profession, their professional role, their understanding of an effective team, and the key aspects of collaboration. There were 32 social work student participants and 33 nursing students who were all divided into four mixed groups. Students also participated in a two-week field experience where their interactions were

observed and supervised by nursing and social work professionals. Lastly, students participated in a debriefing interview that was audiotaped, transcribed, and analyzed for themes.

Chan et al. (2013) found that students reported greater competence, appreciation, respect, and understanding related to their own work and the work of other professions. Chan et al. found that students also reported growth in self-assessment measures. Additionally, the nursing and social work professionals who observed students during the field experience noticed growth in all of the students' skill and competence areas. Chan et al. demonstrated that competence could be measured by field evaluators as well as students' self-assessment.

Achcaoucaou et al. (2014) conducted a mixed-methods study in order to understand methods of assessing student competence in a masters-level program at the University of Barcelona. Students completed a self-assessment, using a computer program, at the beginning of their senior year and again at the end in order to assess their own performance, skill-level, and competence. Achcaoucaou et al. compared the students' two self-assessment scores in order to see determine if there was an evolution in the students' perceived competence. Achcaoucaou et al. found that measuring student competence, using self-report, assisted academic programs in understanding the strengths and weaknesses of their educational program.

Similarly, Ćukušić et al. (2014) conducted research with three different sets of students in order to monitor the effectiveness of online self-assessment tests for undergraduate students enrolled in an online Information Technology course. Ćukušić et al. concluded that students' self-assessment scores were accurate when compared to

students' exam results and pass rates. Furthermore, Ćukušić et al. determined that students grasped key educational concepts when they were exposed to expected program outcomes through self-assessment tests.

Plant et al. (2013) conducted a study with pediatric medical residents where the students self-assessed their ability to perform resuscitation in a staged crisis situation. Students rated their perceived skill prior to the staged crisis, were filmed while they performed the resuscitation, observed their own video, and then rerated their ability based on watching their own performance. Three independent observers also watched the students' videos and completed a similar assessment in order to measure student competence related to resuscitation. Plant et al. found that students consistently rated their performance lower after viewing the video of them actually performing the skills. In addition, students reported that self-assessment, paired with video observation, and compared to independent observers was helpful in developing correct skill and performance. Plant et al. suggested that self-assessment was most valuable when it was paired with another form of assessment.

Dearnley and Meddings (2007) conducted a pilot, mixed-methods study in order to examine the impact of self-assessment on students' learning. Students were asked to complete a student feedback form and a self-assessment form for each assignment completed in a course module. Dearnley and Meddings examined 54 pairs of forms and interviewed six students and five teachers to compare findings. Dearnley and Meddings found that student self-assessment was a valuable method of empowering students, increasing dialogue between students and teachers, assisting students in developing critical awareness, and modeling expectations of lifelong, autonomous learning.

Similarly, Kurnaz & Çimer (2010) conducted a qualitative study in order to discover how students knew whether or not they were learning expected educational competencies. Kurnaz & Çimer asked 168 high school students to complete a test that was comprised of open-ended questions in order to self-assess their evidence of learning. Kurnaz & Çimer found that students used the following strategies to evaluate their knowledge of course materials: self-testing, getting help from others, self-questioning what they had learned, and summarizing the materials. Kurnaz & Çimer found that when students were asked to assess their knowledge, the students engaged in various strategies to gauge their learning and took further actions to gain knowledge. In fact, Kurnaz & Çimer argued that teachers should introduce self-assessment techniques to students in order to assist them in developing reflective and self-regulated learning skills that should be utilized over a lifetime of learning.

Studies That Did Not Support Students' Self-Assessment

Rawlings (2012) suggested that research was needed in order to establish whether students' self-assessment was a good predictor of actual social work direct practice skills. She examined 32 students as they were entering a BSW program and again when they were exiting the social work program. Students completed three assessment tasks, including a 15-minute interaction with a standardized client, a 37-item self-report of their own knowledge, and a personal performance rating immediately following the client interaction. Rawlings compared the students' self-assessment data to the feedback gathered by two independent clinical social workers who observed the videotaped client interactions. She found that education was a significant positive predictor of direct practice skill in the exiting BSW students. However, she also found that students rated

their own performance higher than the independent social work evaluators rated the same students' competence during the client interaction assessment. Rawlings affirmed the need for developing a valid and reliable instrument in order to effectively assess direct practice skill in social work education.

In the field of nursing, O'Boyle et al. (2001) conducted a longitudinal, observational study in order to compare nurses' actual compliance to hand hygiene standards as compared to their self-assessed compliance. O'Boyle et al. invited nurses from four different hospitals to participate in the study. Eligible nurses worked at the hospitals for at least six months, worked in the critical care and post-critical care units, and worked at least one day each week. Nurses completed the Handwashing Assessment Inventory (HAI) that rated motivation, intention, and compliance with hand washing procedures. Approximately two weeks to four months after completing the HAI, the nurses were observed in a clinical setting in order to assess their actual hand washing practices. During observation, there were 1248 incidents where nurses should have washed their hands; however, hand hygiene only occurred 70% of the time. O'Boyle et al. found a poor correlation between self-assessed hand hygiene compliance as compared to actual hand washing practices. In fact, O'Boyle et al. conducted sentinel research in nursing that demonstrated self-assessment was inflated, regardless of intent or motivation.

Similarly, Jenner et al. (2006) conducted a quantitative study in order to investigate how healthcare workers self-reported hand hygiene compared to actual hand washing behaviors. Jenner et al. observed 71 healthcare professionals, which included doctors, nurses, therapists, and assistants, on two medical and two surgical hospital

wards, for 132 hours. An infection control professional and a psychologist recorded 1284 hand washing opportunities where the healthcare workers had contact with a patient, equipment, medication, food, or prior to going on break. Observers recorded no judgment regarding technique or the length of the hand wash; instead, any attempt to wash hands was recorded. The healthcare professionals also completed the Theory of Planned Behaviour *(sic)* self-assessment questionnaire in order to capture intentions and attitudes toward hand hygiene. Jenner et al. found that healthcare workers demonstrated poor compliance to hand hygiene standards, even when patients had serious contagious infections. In fact, Jenner et al. found that workers' self-assessment of compliance did not correlate to actual practice; despite knowing they were being observed. Hand washing was an objective, concrete task to measure skill, yet healthcare workers, across multiple disciplines, overestimated their compliance when self-assessing.

Furthermore, Cole (2009) conducted a mixed methods study in order to compare nursing students' actual hand washing behaviors to their self-assessed perceptions of hand hygiene. A total of 147 nursing students from five senior-level cohorts all completed a self-assessment questionnaire related to intention, perception, attitude, societal norms, difficulty related to compliance, and perceptions of risk associated with hand hygiene. Cole found that nursing students did not objectively assess their own hand hygiene compliance. Furthermore, the students overestimated their hand washing. His research confirmed that individuals overestimated their own levels of compliance, while accurately estimating peer compliance. Cole stated that this inaccuracy was not a result of

dishonesty, but instead an inability to objectively assess oneself, due to inherent pressures to present as good. His research suggested that students unintentionally provide desired data on self-assessments, even if it is not accurate.

Similarly, Dunagan et al. (2014) conducted a mixed methods study in order to measure cultural competence in bachelor-level nursing students. More specifically, Dunagan et al. examined student self-assessment related to cultural knowledge, attitudes, and consciousness using web-based surveys, Facebook®, networking, and email in hopes that online completion would promote more truthfulness. Dunagan et al. found that nursing students answered questions in a way to please others, in spite of the web-based format designed to increase truthfulness. Furthermore, Dunagan et al. discovered that self-assessment was skewed, even when efforts were made to increase truthfulness because the students understood the importance of particular skills. Furthermore, students wished to please the evaluator and therefore, even without malice or intent, would work to prove competence in the desired area.

Furthermore, Choi and Bakken (2013) conducted an exploratory study, at a northeastern state university, in order to evaluate the validity of a standardized tool designed to evaluate nursing students' self-assessment of informatics skills. Choi and Bakken indicated that one of the limitations of their study was the students' tendencies to only highlight the favorable aspects of their performance when self-assessing. Choi and Bakken reported that student self-assessment had limitations due to the tendency of students to only show favorable aspects of their performance. Choi and Bakken's findings supported the notion that various methods of assessment were necessary in order to accurately measure student competence.

Lakanmaa et al. (2014) conducted a cross-sectional survey in order to evaluate the self-assessed competence of intensive and critical care nurses. Graduating nursing students completed the Intensive and Critical Care Nursing Competence Scale, version one (ICCN-CS-1) and the Basic Knowledge Assessment Tool, version seven (BKAT-7). Lakanmaa et al. found that students generally rated their intensive and critical care nursing competence as good, while their BKAT-7 test results indicated that overall student competence was poor. Lakanmaa et al. suggested that objective methods of measuring competence should always be used alongside self-reporting methods.

Cheng and Liou (2013) conducted a longitudinal study in order to investigate whether there was a difference in clinical competence of nursing students from three different types of nursing programs. A total of 440 bachelor-level nursing students completed the Clinical Competence Questionnaire (CCQ) one year prior to graduation and again at graduation. Cheng and Liou found that students from all three programs perceived their clinical competence, professionalism, and general performance with higher confidence than their practice skills demonstrated. Additionally, Cheng and Liou found that as graduation approached, students did not have high confidence related to essential clinical skills that were required for basic nursing practice. Cheng and Liou demonstrated the inconsistency of student self-assessment of their own skill level and competence. Furthermore, Cheng and Liou established that students were overconfident in assessing their practice skills initially, yet when graduation approached, students' confidence dipped, even on basic skills like hygiene, charting, and patient counseling. Cheng and Liou's study demonstrated that self-assessment was not a consistent and reliable method of assessing student competence.

Conclusion

This literature review examined the reliability of faculty, field instructor, and students' self-assessment. It was clear that some studies demonstrated the reliability of all three assessment methods, while other studies concluded that each of these methods of assessment were unreliable (Achcaoucaou et al., 2014; Bogo et al., 2004; Bogo, Regeher, Power, & Regeher, 2007; Bogo et al., 2006; Chan, Lam, & Yeung, 2013; Choi & Bakken, 2013; Cole, 2009; Dunagan et al., 2014; Geisinger, 1980; Güvendir, 2014; Jenner et al., 2006; Macgowen & Vakharia, 2012; O'Boyle, Henley, & Larson, 2001; Rawlings, 2012; Sussman et al., 2014; Ward et al., 2003). Moving forward, this literature review examined research studies designed to compare faculty, field instructor, and students' self-assessment findings. Furthermore, this literature review examined how faculty, field instructor, and students' self-assessment methods were compared to other forms of assessment like an objective tool, digital scanning device, or standardized patient. Finally, this literature review outlined any research studies examining student outcomes across multiple years, using faculty assessment, field instructor assessment, or students' self-assessment. In conclusion, this literature review demonstrated a gap in the literature where no research studies assessed the consistency of faculty, field instructors, and students' self-assessment across three academic years while measuring the same educational outcomes.

Studies Comparing Two Raters: Field, Faculty, or Students

Various studies were conducted in order to compare two of the three following types of assessment: field instructor, faculty, and students' self-assessment. In fact, there were only a handful of studies designed to compare students' self-assessment with field

instructor assessment (Gorton & Hayes, 2014; Mathiesen & Hohman, 2013; Vinton & Wilke, 2011). Conversely, there were several studies designed to compare faculty assessment with students' self-assessment (Byrd & Matthews-Somerville, 2007; Doe, Gingerich, & Richards, 2013; Jackson, 2014; Jensen, 2013; Lawson et al., 2012; Lundquist, Shogbon, Momary, & Rogers, 2013; Root Kustritz, Molgaard, & Rendahl, 2011; Sendziuk, 2010). There were only two studies comparing peer assessment and students' self-assessment (Karnilowicz, 2012; Lew, Alwis, & Schmidt, 2010). However, there was only one study comparing peer assessment with faculty assessment (Falchikov & Goldfinch, 2000) and only two studies comparing students' self-assessment with an objective tool (Baxter & Norman, 2011; Schiekirka et al., 2013). Finally, after conducting an exhaustive literature review, there were no studies found comparing field assessment with faculty assessment.

Comparing Field Assessment and Self-Assessment

Vinton and Wilke (2011) conducted a study with 90 masters-level social work students and 33 field instructors. The study compared how students assessed their own skills and knowledge as compared to the assessment scores given by experienced field instructors in a clinical setting. Field instructors and students rated the students' performance using the Content and Area Survey (CAS) that consisted of 19 items that were developed directly from the CSWE's educational objective standards. Students completed the CAS at the end of their field placement as a posttest assessment of learning. Field instructors were mailed the CAS and asked to complete one for each

student they supervised in field placement. Vinton and Wilke compared the students' self-assessment scores to the field instructors' scores and found overall agreement between how students and field instructors rated students' skills, knowledge, and values.

In their study, Mathiesen and Hohman (2013) also found agreement between field instructors and social work students' assessment ratings. Mathiesen and Hohman conducted a study in order to compare how undergraduate and masters-level social work students assessed their knowledge, attitude, personal use, and future intended use of evidence-based practice (EBP) compared to how field instructors assessed these same areas. Mathiesen and Hohman included 134 students and 50 field instructors in this study and found that undergraduate level students and field instructors rated attitudes and future use of EBP similarly; whereas masters-level students rated them higher. Mathiesen and Hohman found consistency between bachelor-level students' and field instructors' evaluation scores when using the same assessment tool to measure educational EBP.

Conversely, Gorton and Hayes (2014) conducted a descriptive survey study in order to investigate whether there was a relationship between critical thinking skills and clinical judgment in nurse practitioners. Students completed the California Critical Thinking Skills Test to self-assess critical thinking. Students also completed the Clinical Decision Making in Nursing Scale to self-assess clinical judgment. Nursing preceptors completed the Preceptor Evaluation Tool, while observing students in a clinical setting. Gorton and Hayes found that there were no statistical relationships between students' self-assessment of critical thinking and clinical judgment. Gorton and Hayes also found that student assessment of competence did not statistically correlate to actual skill. Instead, Gorton and Hayes found that a more reliable method of assessing student

competence was preceptor observations. Gorton and Hayes' findings supported the notion that field instructor assessment is more valuable than student self-assessment of social work competence.

The studies comparing students' self-assessment with field instructors' assessment provided diverse findings. Some researchers found agreement between field instructors' and students' self-assessment of competence (Mathiesen & Hohman, 2013; Vinton & Wilke, 2011). However, Gorton & Hayes (2014) concluded that field instructors were more accurate than students when assessing students' competence.

Comparing Faculty Assessment and Self-Assessment

Sendziuk (2010) conducted a study in order to compare how students and tutors rated similar assignments when effective feedback was provided. His study involved second-year and third-year history students in an education program as well as tutors who had all been trained on the Learning-Oriented Assessment (LOA) that outlines clear standards for rating poor and good academic performance. Students and tutors were informed of the expectations and criteria for success on various assignments. Students submitted their assignments and tutors read the students' work and provided explicit feedback, but not a letter grade. Students reviewed the feedback, assigned themselves a letter grade, and provided a 100-word justification for the self-assessed grade. A total of 73 essays were graded, self-assessed, and followed by a student's anonymous questionnaire. Sendziuk found that nearly two-thirds of students' self-assessed grades aligned with the grade assigned by the tutor. Of the students who disagreed with the tutor, almost half of those students had over-estimated their performance as compared to the

tutor's grade. He also found that when clear expectations were given and effective feedback related to performance was provided, students and tutors could provide congruent and aligned assessment of performance.

Lundquist et al. (2013) found that students graded themselves lower than faculty when grading the same assignments. Lundquist et al. conducted a study in order to compare pharmacy students' self-assessment of their communication skills with professors' formal evaluation of the same students' communication skills demonstrated in a therapeutics course. Over three years, faculty assessed 401 second-year pharmacy students' communication skills, using a standard rubric, after students had presented an individual oral presentation and a group presentation. Students assessed their own performance using the same standard rubric. Interestingly, faculty rated students' individual and group presentations higher than students rated themselves. In fact, students scored themselves consistently lower than faculty when rating their own performance and skill.

Conversely, Root Kustritz et al. (2011) found that students overestimated their performance skills. Root Kustritz et al. conducted a study in order to compare how veterinary students assessed their clinical competence following a small-animal clinical rotation as compared to professors' assessment of the students' clinical competence. The study was conducted at the University of Minnesota and 100 senior-level students participated. Following the clinical rotation, students completed an online assessment of their skills and provided a grade of A-F for their performance Grades of an A or a B reflected high competence, while C and D grades denoted low competence; an F reflected no competence. Students' assessments were coded and paired with faculty assessments,

so that students' identities remained anonymous. Root Kustritz et al. found that low performing students were more likely to overestimate their competence, especially in the areas of professionalism, clinical skill, and knowledge. Root Kustritz et al. concluded that students' self-assessment should not be used as a primary source of evaluating student competence.

Conversely, Jensen (2013) conducted a study in order to compare associate-level and bachelor-level nursing students' self-assessments with faculty observation scores after the students participated in a simulated emergent patient scenario. Students and faculty completed the Lasater Clinical Judgment Rubric (LCJR) that evaluated students' clinical reasoning during the simulated patient care scenarios. Jensen found that student and faculty scores were significantly similar. He concluded that students needed more opportunities to assess their own clinical performance. Furthermore, he reported that students could accurately self-assess when they were provided effective feedback related to their performance throughout their educational program.

Doe et al. (2013) conducted a study to examine how graduate-level teaching assistants (GTA) graded 480 student papers, across two writing assignments, in an Introductory Psychology course. Doe et al. measured the GTA's quality of feedback, accuracy, and consistency when grading writing assignments. Doe et al. found that GTA's grading accuracy, consistency, and quality of feedback all improved from the first to the second round of paper grading. However, Doe et al. also found that GTAs and professors' grades were generally consistent, yet GTAs did tend to give students slightly higher grades than professors. Doe et al. believed that interactions with the students, where GTAs developed relationships with students impacted scoring and explained the

higher scores. Furthermore, Doe et al. proposed that the second grading occurred during the end of the semester when the GTAs were especially busy, creating an urgency and leniency when grading student papers. Doe et al. noted that GTAs' grading was somewhat inaccurate and inconsistent, even after training. Furthermore, GTAs' grading indicated that external factors like relationships, interactions with students, time constraints, and a desire to see positive results could impact grading practices.

Jackson (2014) conducted a study with 1000 undergraduate business students in order to compare students' self-assessment related to employability skills when compared to faculty assessment of student readiness. Students and faculty used the business program's Employability Skills Framework assessment tool that evaluated 10 skills and 40 behaviors on a 10-point scale. He found that higher performing students tended to underestimate their skill, while lower achieving students tended to overrate their own performance and skills. He also found that age, gender, and previous experience did not impact the reliability of self-assessment. Jackson warned against exclusively using students' self-assessment as a means of measuring program effectiveness and student skill in higher education. Furthermore, Jackson warned that educational programs must provide students with training on learning expectations, engage in ongoing dialogue regarding assessment criteria, and provide remediation if self-assessment is expected to be used in higher educational programs.

Lawson et al. (2012) conducted a study in order to compare business students' self-assessment scores to faculty scores when measuring the same criteria and using the same evaluation tool. The study included 239 second-year undergraduate students who were enrolled in an Economics course. The students completed a pretest and a posttest

survey designed to evaluate their skills and knowledge on four tasks, using the online program called ReView. Lawson et al. found that during the initial self-assessment students' scores were greatly overestimated when compared to faculty scores related to student knowledge and performance. However, Lawson et al. also found that students' ability to self-assess improved over time and became more consistent with faculty assessment of students' abilities. In fact, students' self-assessment skills and knowledge of expectations improved with increased exposure to assessment criteria and with experience in evaluating their own performance. Lawson et al. concluded that ongoing self-assessment required students to become familiar with the criteria and expectations of performance.

Finally, Byrd and Matthews-Somerville (2007) conducted a study with 30 undergraduate students in order to compare students' self-assessment of academic behaviors with faculty assessment of the same behaviors. Students and faculty completed the Listening and Study Skills Survey (LSSS) which consisted of 30 items that covered the following four areas: study behaviors, participating behaviors, knowledge of learning style, and emotional connectedness in the classroom setting. The LSSS used a three-point Likert scale to measure if a student performed a particular behavior always, sometimes, or never. Byrd and Matthews-Somerville found low statistical correlations between the students' self-assessments and actual performance measured by faculty. In fact, students rated themselves higher than faculty. Byrd and Matthews-Somerville concluded that students needed to understand their own learning styles and behaviors before their behavioral performance could improve.

The studies comparing students' self-assessment with faculty assessment provided diverse findings. Some studies concluded that students' and faculty assessment scores were congruent (Jensen, 2013; Sendziuk, 2010). However, other studies concluded that students overestimated their competence for a variety of reasons and should not be used as a primary source of evaluating student competence (Byrd & Matthews-Somerville, 2007; Doe et al. 2013; Jackson, 2014; Lawson, 2012; Root Kustritz et al., 2011). Finally, Lundquist et al. (2013) concluded that students actually assessed themselves lower than faculty.

Comparing Peer Assessment and Self-Assessment

Lew et al. (2010) conducted a study with 3588 first-year students enrolled in a graduate program in order to evaluate whether students could accurately self-assess, could improve their self-assessment skills over time, and if the self-assessment scores were more accurate when students believed that the assessment contributed to their overall learning. Throughout one semester, all of the students completed approximately 80 self-assessments in order to evaluate their perceptions about their own learning process. Peer tutors also evaluated students' learning process and growth. Lew et al. discovered that students provided weak and even poor self-assessment accuracy, assessment outcomes did not improve over time, and perceptions about learning contributions did not impact accuracy. Lew et al. concluded that students who performed higher academically tended to provide more accurate self-assessments related to their own skill.

Similarly, Karnilowicz (2012) conducted a study with 64 undergraduate psychology students in order to compare students' self-assessment of skill with tutors'

assessment of students' performance. He found that students were able to evaluate their own skills with reasonable accuracy. However, Karnilowicz also found that higher performing students tended to underestimate their performance, while lower performing students tended to overestimate their skills.

Interestingly, Lew et al. (2010) concluded that students provided consistently poor self-assessment. Yet, Karnilowicz (2012) concluded that students provided reasonable self-assessment accuracy. Remarkably, both Lew et al. and Karnilowicz concluded that higher-achieving students provided the most accurate self-assessments when measuring competence.

Comparing Peer Assessment and Faculty Assessment

Falchikov and Goldfinch (2000) conducted a meta-analysis of 48 quantitative studies comparing peer and professor assessments of student performance. Falchikov and Goldfinch found that peer and faculty evaluations align more closely when global criteria were assessed rather than multiple individual criteria. Falchikov and Goldfinch also found that peer assessment aligned more closely to faculty ratings when measuring products and processes, rather than performance within the context of professional practice. Falchikov and Goldfinch also concluded that studies with high design quality tended to offer more valid peer assessment findings. Lastly, Falchikov and Goldfinch found that peer assessment was valid in beginner as well as advanced courses.

Comparing Self-Assessment and an Objective Tool.

Baxter and Norman (2011) conducted a study with undergraduate nursing students to compare students' self-assessments of their clinical skills with faculty who observed the students in a simulation lab. Senior-year students completed a pretest and a

posttest self-assessment related to their performance in a simulated medical/surgical emergency scenario. Baxter and Norman found that student and faculty scores related to student performance did not correlate in all comparisons except one. Baxter and Norman found that simulations increased students' confidence and competence when dealing with emergency situations; however, simulations did not impact the students' ability to communicate and collaborate in emergency scenarios. Baxter and Norman warned that student self-assessments in simulation experiences could build erroneous confidence and a perception of competence that was inaccurate.

Conversely, Schiekirka et al. (2013) conducted a study in order to examine the validity of an evaluation tool that was paired with student self-assessment and designed to evaluate the effectiveness of a specific educational course. Schiekirka et al. compared the students' self-assessment scores to faculty grades earned using objective tests throughout the cardiorespiratory course module. Eighty-three medical students enrolled in their fourth-year of school completed a pretest and a posttest to measure their own learning related to 33 specific learning objectives. Schiekirka et al. found that students' self-assessed scores matched the growth that was seen in objective test scores administered by faculty.

Comparing Multiple Raters

There were some studies conducted that were somewhat similar to the research conducted in this dissertation; however, none of the studies were exactly the same. There were two studies conducted in nursing that compared the same educational goals using three different methods of assessment (Hwang, Hsu, Shadiev, Chang, & Huang, 2015; Maloney, Storr, Paynter, Morgan, & Ilic, 2013). There were two other related studies

comparing peer assessment, students' self-assessment, and faculty assessment (Senger & Kanthan, 2012; Wagner, Suh, & Cruz, 2011). There was one study that compared faculty assessment, peer assessment, and a digital scanning device (Taylor, Grey, & Satterthwaite, 2012). And, there was a study that compared peer assessment, students' self-assessment, a standardized patient, and faculty assessment (Austin & Gregory, 2007). There was one study that examined various students' self-assessment in the same educational program across different academic years (Berdrow & Evers, 2010). Finally, there was one study that examined social work faculty, field instructors, and students' self-assessment; however, the focus of this comparison study was different than the focus of this dissertation (Sherer & Peleg-Oren, 2005).

Comparing the Same Educational Goals Using Three Methods of Assessment

Maloney et al (2013) conducted a pilot study in order to examine the efficacy of assessing the same two nursing skills, utilizing three various methods of assessment. Maloney et al. randomly assigned undergraduate nursing students to three groups where all of the students were taught the same two specific practical nursing skills. The first group discussed the new skills, observed a demonstration, practiced, and then was given feedback about their performance. The second group learned the same two skills using a video tutorial, followed by a video demonstration, and instructions to practice the skill together for ten minutes. The third group watched a video demonstration of the two skills, was required to film a self-demonstration, and complete a paper comparing their personal skill to the expert video demonstration. All of the students then demonstrated the two new skills for seven examiners and completed a survey assessing their levels of satisfaction with the teaching method they learned. Maloney et al. found there were no

differences between the students' performance outcomes, regardless of the three teaching methods and students reported the same level of satisfaction with all three methods. Maloney et al. evaluated the same educational goals using three methods of assessment. This study is similar to the study conducted in this dissertation where the same educational goals were evaluated using three various methods of assessment, in order to determine validity and reliability.

Hwang et al. (2015) conducted a study using a pretest-intervention-posttest design in order to explore if the use of self-assessment, journaling, and peer-sharing assisted students in an online learning environment. The author also examined the relationship between the three methods of assessing student achievement. Hwang et al. found that utilizing students' self-assessment, peer-sharing, and journaling enhanced students' overall learning; however, their results indicated that journaling had the strongest positive impact on students' achievement. Furthermore, Hwang et al. found that self-assessment and learning journals complimented each other and when the two strategies were combined students achieved even higher performance scores. Hwang et al. concluded that assessments are most effective when utilized in combination with other assessment tools.

Comparing Peer Assessment, Faculty Assessment, and Self-Assessment

Senger and Kanthan (2012) conducted a study with 41 masters-level physical therapy students in order to compare students' self-assessment, peer assessment, and faculty assessment when examining students' learning portfolios from a Pathology course. The portfolios were graded by the student, a peer, and faculty at the midterm and again at the course final using the same measurement tool. Senger and Kanthan found that grades provided by the student, a peer, and faculty were more consistent at the final

exam than the midterm. Interestingly, at the midterm, students and faculty graded student portfolios similarly, while peers graded students the lowest. At the final examination all three assessors graded within a similar range, although students and peers graded students slightly lower than faculty. Senger and Kanthan recommended that multiple methods of assessment were used and compared when evaluating student performance.

Wagner et al. (2011) conducted a study with sixth-year pharmacy students in order to determine the reliability and value of peer-grading and self-grading when compared to faculty grading. The students were assessed on an overall formal presentation and papers during their Advanced Pharmacy Practice Experience courses, using a detailed grading rubric. Wagner et al. found that students assigned themselves lower grades on the formal presentation and the overall course than faculty graded the same students. For the seminar portion of the course, faculty and student scores were the same. Students graded their peers higher than faculty on every component. Wagner et al. concluded that using a detailed rubric and the combination of faculty assessment, students' self-assessments, and peer assessment to measure student competence was ideal in order to meet accreditation standards and ensure students were prepared for professional careers.

Comparing Faculty Assessment, Peer Assessment, and Digital Scanning

Taylor et al. (2012) conducted a study in order to compare third-year dental students' performance using two experienced faculty graders, peer assessment, and a digital scanning device. Seventy-eight students were required to mark, measure, and prepare a dental gold crown as part of a pre-clinical skills course. Faculty and peers assessed the students' performance based on a standardized grading form. The digital

machine, Prepassistant, was used as the third method of assessment. Prepassistant is a three-dimensional optical scanner that can scan, photograph, and measure tooth molds based on preprogrammed specs. Taylor et al. found that the two experienced dental faculty provided the most consistent form of assessment. However, none of the methods of assessment provided reliability when compared to the digital scanner. Taylor et al. concluded that the digital scanning device was not a good way to assign grades for dental gold crown preparations because of the machine's inability to assess multiple factors.

Studies Comparing Peer, Faculty, Student, and a Standardized Patient Assessment.

Austin and Gregory (2007) compared students' self-assessment scores of 80 senior bachelor-level pharmacy students to the assessment scores provided by peers, a standardized patient, and faculty. Students were enrolled in a professional practice laboratory course that involved simulations with standardized patients, who were actors prepared to role-play specific medical conditions and provide feedback and support to students. The standardized patients also rated the students' performance following the simulation. Students were graded by all four assessors using the same standardized global rating scales. Students were placed into cohorts of eight and while one student performed in the simulation exercise, the other seven students completed a peer evaluation form on the one student who was performing the simulation. Austin and Gregory found that students' self-assessment was inflated compared to the other three assessors. Furthermore, students' self-assessment scores were particularly low in the areas of empathy, logic, focus, and coherence of interviewing. Austin and Gregory recommended that self-assessment should be paired with other forms of assessment to ensure accuracy.

Evaluating Students' Self-Assessment across Academic Years

Berdrow and Evers (2010) conducted a multi-year, multi-course assessment using the Bases of Competence Model in order to evaluate how students' self-assessed their skills related to workplace readiness. Students completed a self-assessment instrument at the beginning and the end of each semester for three different courses from the years 1996 to 2000. A total of 635 valid responses were analyzed. Berdrow and Evers found that students were most confident in communicating and least confident in mobilizing innovation and change. Interestingly, students across all areas were less confident across the four years of the study. Furthermore, junior-level students were consistently more confident in their overall competencies than freshman students; yet, senior-level students were the only participants to rank managing-self higher than communicating. Berdrow and Evers found that student confidence did grow throughout the years of their educational program; however, students seemed to underestimate the demands of professional work and displayed "artificially inflated confidence in their own competencies" (p. 432).

Comparing Field Assessment, Students' Self-Assessment, and Faculty Assessment

Sherer and Peleg-Oren (2005) conducted a study in order to compare how social work faculty, field instructors, and students assessed the kind of work and the importance of the work students completed during field placement. The study consisted of 30 social work faculty, 120 social work field instructors, and 287 second-year and third-year undergraduate social work students. All participants completed a two-part Analysis Questionnaire that captured demographic information of the participants as well as ranked 100 statements related to activities generally carried out by students during their

field experience. Sherer and Peleg-Oren found that faculty, students, and field instructors agreed on 15 central roles that students should fulfill in field placement; however, assessors disagreed on the ranking and frequency of those central roles. Interestingly, both students and faculty perceived that students were performing specific social work roles more often in a field placement setting than field instructors reported. Sherer and Peleg-Oren expected to find consistency between student and field instructor rates because they were in the field setting together, while the faculty member was remote; instead, there was more consistency between students and faculty and not the field instructors. Furthermore, it appeared that students and faculty were both eager to see activity related to all 15 roles; however, field instructors viewed activity on all 15 roles as pertinent. Sherer and Peleg-Oren concluded that field instructors were influenced by agency demands and viewed social work roles in terms of job descriptions rather than the full scope of possible social work roles. Sherer and Peleg-Oren's study demonstrated that students and faculty have similar expectations of the field placement experience; however, field instructors have different expectations related to the field experience.

Summary

Higher educational institutions are required to assess students' skills prior to graduation. Assessment is designed to ensure quality programming is occurring and to protect the public from incompetent practitioners. Similar to social work, related fields of study like, nursing and education, are also required to prove student competence to accrediting and regulatory entities.

Research demonstrated that there were various methods of assessment commonly used to evaluate student competence prior to graduation. The most common forms of

assessment used in social work education were field instructor assessment, faculty assessment, and students' self-assessment (Council on Social Work Education, 2008). There were multiple studies that supported educational programs in using field, faculty, and students' self-assessment to measure student competence (Achcaoucaou et al., 2014; Chan, Lam, & Yeung, 2013; Ćukušić, Garača, & Jadrić, 2014; Plant, Corden, Mourad, O'Brien, & van Schaik, 2013; Ward et al., 2003). However, there were just as many studies that opposed using field, faculty, or students' self-assessment to evaluate students' readiness for professional practice (Choi & Bakken, 2013; Cole, 2009; Dunagan et al., 2014; Jenner et al., 2006; O'Boyle, Henley, & Larson, 2001; Rawlings, 2012).

Furthermore, there were several research studies comparing the accuracy of students' self-assessment with faculty, tutors, peers, and even objective assessment tools (Baxter & Norman, 2011; Falchikov & Goldfinch, 2000; Karnilowicz, 2012; Lew et al., 2010; Schiekika et al., 2013). The results of those studies provided diverse findings. Some of the research studies supported students' self-assessment, while other studies demonstrated that faculty, tutors, peers, or objective tools provided more reliable evaluations of students' competence.

In conclusion, there were also studies comparing three or four different assessment tools to measure the same educational goals (Austin & Gregory, 2007; Berdrow & Evers, 2010; Hwang et al., 2015; Maloney et al., 2013; Senger & Kathan, 2012; Sherer & Peleg-Oren, 2005; Taylor et al., 2013; Wagner et al., 2011). However, there were no studies assessing field instructor, faculty, and students' self-assessment of students' competence of social work core competencies across three years. This dissertation represents new research that fills a gap in the existing literature.

CHAPTER III

METHODOLOGY

Introduction

Higher educational institutions are required to demonstrate that students are competent prior to graduation (Fletcher, et al., 2012). Accredited programs, like nursing, education, and social work utilize various methods of assessing student competence in order to ensure their graduates are prepared to enter professional practice. When assessing student aptitude, it is important for higher educational institutions to utilize valid and reliable methods of evaluating student competence, especially in disciplines where graduating students will work with vulnerable and at-risk populations (Alperin, 1996).

Social work education is accredited by the CSWE. Bachelor-level students must be proficient in 13 areas of core competence. Embedded within the 13 core competencies are also 41 practice behaviors that students are expected to consistently demonstrate prior to graduation. The CSWE also requires a 400-hour field placement where BSW students work within a clinical setting with a field instructor (a professional social worker) who evaluates the student's social work competency related to the 13 core competencies and 41 practice behaviors. The 13 core competencies and 41 practice behaviors can be viewed in Appendix A.

The CSWE considers field instructor assessment the signature pedagogy for social work education and the best method of assessing student's readiness to enter professional practice (Council on Social Work Education, 2008). During accreditation site visits, the CSWE requires BSW programs to provide evidence that field instructors have assessed students' competence prior to graduation. The CSWE also requires social work programs to provide a second method of assessing students' competence. The CSWE reports that most BSW programs utilize faculty assessment or students' self-assessment as their second means of evaluating student competence.

This dissertation included a comprehensive literature review in order to evaluate previous research that validated or invalidated the reliability of field instructor assessment, faculty assessment, and students' self-assessment. There were multiple studies that validated the reliability of faculty assessment, field instructor assessment, and students' self-assessment of competence; however, there were just as many studies that questioned the consistency of each of these methods of evaluation (Achcaoucaou et al., 2014; Alquraan et al., 2010; Bahous & Nabhani, 2011; Bennett et al., 2012; Bogo et al., 2004; Bogo et al., 2006; Bogo et al., 2007; Chan, et al., 2013; Cheng & Liou, 2013; Choi & Bakken, 2013; Cole, 2009; Ćukušić et al., 2011; Dearnley & Meddings, 2007; Dunagan et al., 2014; Geisinger, 1980; Gockel & Burton, 2014; Güvendir, 2014; Hipolito-Delgado et al., 2011; Holmes & Smith, 2003; Jeffreys & Dogan, 2013; Jenner et al., 2006; Komarraju, 2013; Kurnaz & Çimer, 2010; Lakanmaa et al., 2014; Long, 2014; Macgowen & Vakharia, 2012; Marrero et al., 2013; Mathiesen & Hohman, 2013; Nasrallah, 2014; O'Boyle et al., 2001; Peleg-Oren et al., 2007; Plant et al., 2013; Rawlings, 2012; Rogers & McDonald, 1995; Sussman et al., 2014; Vinton & Wilke,

2011; Ward et al., 2003; Wiechelt & Ting, 2012). This study also discovered that there were no existing previous studies that examined the consistency of how field instructors, faculty, and students' self-assessed students' 13 social work core competencies across three years. The purpose of this study was to fill a gap in the literature by evaluating three different methods of assessing BSW student competence in order to understand how students' self-assessment, field instructor assessment, and faculty direct assessment correlated when comparing the same educational objectives (CSWE's 13 core competencies) over a three-year period.

This chapter provides a detailed step-by-step examination of the research methodology utilized, including a description of the research design, population studied, data collection used, analytical methods, and study limitations. This dissertation sought to answer the following research questions:

1. What are the differences or similarities in how: faculty assess Bachelor of Social Work student competence across three years, field instructors assess student competence across three years, and students self-assess competence across three years?
2. What is the consistency across the raters when comparing how faculty, field instructors, and students assess the same Bachelor of Social Work students' competence across three years?

Research Design

This section outlines the methods and procedures used to answer each research question. Quantitative research methodology was used in order to address both research question one and research question two outlined in this study. For the first research question, the researcher carried out the analysis in three sections. For all three sections,

the researcher used the Kruskal-Wallis H test to analyze the rank means. Typically, a between-subjects, omnibus Analysis of Variance (ANOVA) would be used (Leedy & Ormrod, 2010); however, the Kruskal-Wallis H test was required because the dependent variables failed to meet parametric assumptions, due to a ceiling effect that was created when the raters gave multiple students high assessment scores (Ruxton & Beauchamp, 2008).

In the first section, the researcher assessed the rank mean scores and standard deviation for faculty when rating the students' 13 core competencies (2.1.1-2.1.10d) for the academic years of 2012, 2013, and 2014. For example, the researcher compared how faculty assessed competency 2.1.1: Professional Identity as a Social Worker for all students in 2012, to all the students in 2013, and to all of the students in 2014. The researcher conducted this same type of between-group Kruskal-Wallis H test comparison for each of the 13 CSWE core competencies rated by faculty. Comparing faculty evaluation scores of students' competence across three academic years allowed the researcher to determine if there were significant differences or similarities in how faculty assessed different groups of students for all 13 CSWE core competencies across multiple years.

Next, the researcher assessed the rank mean scores and standard deviation for field instructors when rating the students' 13 core competencies for the academic years of 2012-2014. For example, the researcher compared how field instructors evaluated competency 2.1.1: Professional Identity as a Social Worker for all students in 2012, to all students in 2013, and to all of the students in 2014. The researcher conducted the same type of Kruskal-Wallis H. test comparison for each of the 13 CSWE core competencies.

Comparing field instructors' evaluation of students' competence across three academic years allowed the researcher to evaluate if there were significant similarities or differences in how field instructors assessed different groups of BSW students' competence.

In the third section, the researcher assessed the rank mean scores and standard deviation for students' self-assessment when rating their own competence related to the CSWE's 13 core competencies. For example, the researcher compared how different groups of students evaluated competency 2.1.1: Professional Identity as a Social Worker for themselves in 2012, to the students who rated themselves in 2013, and to the students who rated themselves in 2014. The researcher conducted the same Kruskal-Wallis H. test comparison for each of the 13 CSWE core competencies. Comparing how three different groups of students assessed their own competence allowed the researcher to evaluate significant similarities or differences in how various groups of students assessed their own social work competence.

For the second research question, the researcher used the Friedman's test to analyze the data. Typically, a within-subjects, omnibus ANOVA would be used (Leedy & Ormrod, 2010); however, the Friedman's test was required because the dependent variables did not meet parametric assumptions due to a ceiling effect that was created when the raters gave many of the students high assessment scores (Pereira, Afonso, & Medeiros, 2015).

The researcher assessed the rank mean scores and standard deviation for faculty, field instructors, and students' self-assessment when all three groups of raters evaluated the same students' 13 core competencies (2.1.1-2.1.10d) for the academic years of 2012,

2013, and 2014. For example, the researcher compared how faculty assessed competency 2.1.1: Professional Identity as a Social Worker for all students 2012-2014, to how field instructors assessed the same students 2012-2014, and to how students assessed their own competence across 2012-2014. The researcher conducted the same Friedman's test comparison for each of the 13 CSWE core competencies. Comparing how students, faculty, and field instructors, assessed the same students' allowed the researcher to determine if there were significant differences or similarities in how raters assessed the same group of students for all 13 CSWE core competencies across three years. For example, when a student rated their own competence high, did faculty and/or the field instructor also rate the same student's competence as high?

Participants

This study was conducted using three years (2012-2014) of de-identified, historical assessment data from the Social Work Department of one Midwestern, accredited BSW program. The assessment data was previously collected by the Social Work Department and included faculty, field instructor, and the students' self-assessment of the CSWE's 13 core competencies for all students in their final semester of the social work program. At the time of assessment, all BSW students were enrolled in a 450-hour field placement in a professional clinical setting within various community agencies. All assessed students were simultaneously enrolled in an academic course, Field Seminar II, with the University's social work Field Director.

Demographic information, such as ages of the students, ethnicity, and gender, were not available. Across all three academic years (2012-2014), 83 total BSW students were assessed. For 2012, there was an $n = 21$. Faculty and field instructor assessment data

were provided for all 21 students in 2012, a completion rate of 100%. However, there were only 9 student self-assessment posttests available for 2012, a completion rate of 42.9%. For 2013, there was an $n = 36$. Faculty and field instructor assessment data were provided for all 36 students in 2013, a completion rate of 100%. However, there were only 19 student self-assessment posttests available for 2013, a completion rate of 52.8%. For 2014, there was an $n = 26$. Faculty and field instructor assessment data were provided for all 26 students in 2014, a completion rate of 100%. However, there were only 17 total student self-assessment posttests available for 2014, a completion rate of 65.3%. It should be noted that the Social Work Department indicated that there had been a larger return rate for students' posttests each of the three academic years; however, when pulling the individual, archived forms several students' posttests could not be located in storage.

Data Collection

For this study, all historical data was obtained from the University's Social Work Department, after receiving authorization from the University's Dean and IRB approval. The archival data contained each student's averaged competency scores assigned to them by faculty, field instructors, and the students themselves. The faculty assessed student competence using five rubrics (located in Appendix B). There were a total of three different faculty assessors, one for 2012, one for 2013, and one for 2014.

The field instructors assessed student competence using the social work department's Field Placement Evaluation form (located in Appendix C). In 2012, there were 19 different field instructor evaluators for the 21 students who were assessed. On two occasions, there were two students who were at the same clinical placement and evaluated by the same field instructor, resulting in 19 of 21 different field instructor

evaluators. In 2013, there were 33 different field instructor evaluators for the 36 total BSW students; because three field instructors had two students assigned to their clinical setting. And, in 2014, there were 23 different field instructor evaluators for the 26 total BSW students. Again, there were three field instructors who supervised and evaluated two BSW students each.

The students assessed their own competence using the social work department's posttest form (located in Appendix D). There were a total of 83 BSW students enrolled in the social work program during 2012-2014; however, self-assessment scores were only available from 45 total students. The faculty assessment rubrics, the field instructor Field Evaluation form, and the students' posttest form all evaluated students' based on the CSWE's 13 core competencies.

Faculty Assessment

For the faculty assessment, the University's social work Field Director utilized rubrics to grade five course assignments. The BSW students completed these five assignments in their final semester of the social work program while enrolled in the Field Seminar II course that was designed to support students while they were in field placement and to also conduct a final assessment of students' competence prior to completing the social work program. The rubrics assessed 24 of the CSWE's 41 practice behaviors embedded within the 13 core competencies. The Social Work Department reported that when the rubrics were originally created, the faculty focused on assessing the 13 core competencies and not necessarily all of the practice behaviors. They have revised their rubrics and now assess all 41 CSWE practice behaviors.

The *Stress & Boundary Issues Paper* assessed two of the five practice behaviors (#3 and #6) embedded within competency 2.1.1: Professional Identification as a Social Worker. The *Professional Ethics Paper* assessed one of four practice behaviors (#8) embedded within competency 2.1.2: Application of Social Work Ethical Principles. The *Case Presentation* assignment assessed one of three practice behaviors (#12) embedded within competency 2.1.3: Application of Critical Thinking; two of the four practice behaviors (#16-17) embedded within core competency 2.1.4: Diversity in Practice, both practice behaviors (#23-24) embedded within core competency 2.1.7: Application of Human Behavior and the Social Environment Knowledge; three of the four practice behaviors (#29-31) embedded within core competency 2.1.10a: Effective Engagement, all four of the practice behaviors (#32-35) embedded within core competency 2.1.10b: Effective Assessment; and three of the five practice behaviors (#37-39) embedded within core competency 2.1.10c: Effective Intervention.

The *Agency Analysis* assignment assessed two of the three practice behaviors (#18 and #20) embedded within core competency 2.1.5: Advancement of Social and Economic Justice; one of the two practice behaviors (#26) embedded within core competency 2.1.8: Engagement in Policy to Advance Social Well-Being; and, one of the two practice behaviors (#28) embedded within core competency 2.1.9: Response to Context that Shapes Practice. Lastly, the *Semester Project* assessed one of the two practice behaviors (#22) embedded within core competency 2.1.6: Engagement in Research-Informed Practice, and the only practice behavior (#41) embedded within core competency 2.1.10d:

Effective Evaluation. See Appendix A for a complete list of the CSWE's 41 practice behaviors and 13 core competencies. See Appendix B for all five faculty assessment rubrics.

Social work faculty rated students' performance for all five assignments using a four-point scale where 90-100% represented Excellent, 80-89% represented Meets Expectations, 70-79% represented Needs Improvement, and 0-69% represented Unacceptable performance. The Social Work Department calculated the students' overall core competency scores so that a response of Excellent was given a score of four, Meets Expectations a score of three, Needs Improvement a score of two, and Unacceptable a score of one.

On each of the faculty rubrics, the core competency was listed as a header and then the actual practice behaviors were used to rate the student's competence. Practice behavior scores were then averaged in order to create the overall core competency score. For example, core competency 2.1.1 has six practice behaviors; however, the faculty only rated two of the practice behaviors on the rubric. Therefore, to calculate the overall core competency score for 2.1.1, faculty averaged the two practice behavior scores. So, if a student received a score of 90% (4) and a score of 85% (3) on the other practice behavior the faculty would total the score (7) and divide by 8 (total score possible) to reach the core competency average (88%) for competency 2.1.1: Professional Identification as a Social Worker. See Appendix B for the five Faculty Assessment Rubrics.

Field Instructor Assessment

For the field instructor assessment, a standardized Field Placement Evaluation form was given to all field instructors by the University's Social Work Field Director.

The Field Placement Evaluation form allowed field instructors to assess students' competence on two occasions; first, when the student had completed 225 hours in field placement and secondly at the conclusion of their 450-hour field placement within a clinical setting. For this study, only the 450-hour Field Placement Evaluation scores were utilized. Field instructors were professional social workers who either possessed a Masters in Social Work degree or a Bachelor in Social Work degree and two years of experience. Field instructors received training on completing the Field Placement Evaluation form from the Field Director prior to students being placed into the clinical settings. Field instructors assessed students on all of the 41 practice behaviors using a four-point scale where 90-100% represented Exceeds Expectations, 80-89% represented Meets Expectations, a score of 70-79% represented Needs Improvement, and 0-69% represented Unacceptable performance.

The Social Work Department calculated the students' overall core competency scores so that a response of Exceeds Expectations was given a score of four, Meets Expectations a score of three, Needs Improvement a score of two, and Unacceptable a score of one. On the Field Placement Evaluation form, the core competency was listed as a header and the actual practice behaviors were utilized to rate the student's competence. The practice behavior scores were then totaled and averaged for each core competency. For example, if a student received a score of 92% (4), 80% (3), and 82% (3) on the three practice behaviors assigned to core competency 2.1.10b, then those three scores were added together (10) and divided by 12 (the total possible score), resulting in an average score of 83% for that student on core competency 2.1.10b: Effective Assessment. See Appendix C for the Field Placement Evaluation form.

Student Self-Assessment

For the student's self-assessment, a standardized posttest form was given to all social work students who were concluding their final semester in the University's BSW program, which included completing a 450-hour field placement in a clinical setting and finishing their Field Seminar II course. Students used a four-point scale to rate their own confidence in their ability to perform the social work practice behaviors as Confident, Somewhat Confident, Somewhat Unconfident, or Unconfident.

The core competency headers were not listed on the posttest; instead, only the practice behaviors were listed. In addition, not all 41 practice behaviors were listed on the posttest assessment form; instead, the form measured 24 of the 41 practice behaviors. The Social Work Department reported that they never intended to compare the data from the three assessment tools to each other and originally designed the posttest to get a sample of students' confidence. The Social Work Department has revised the posttest form to now include all 41 practice behaviors in the students' posttest assessment; however, that was not the original structure of the dataset utilized in this study.

For core competency 2.1.1, the posttest form assessed two of the six CSWE practice behaviors. For core competency 2.1.2, the posttest assessed one of the four CSWE practice behaviors. For competency 2.1.3, the posttest assessed one of the three CSWE practice behaviors. For competency 2.1.4, the posttest assessed two of the four CSWE practice behaviors. For competency 2.1.5, the posttest assessed two of the three CSWE practice behaviors. For competencies 2.1.6, 2.1.7, and 2.1.9, the posttest assessed one of the two CSWE practice behaviors. For competencies 2.1.8, 2.1.10a, 2.1.10b, and

2.1.10d, the posttest assessed all of the CSWE practice behaviors assigned to each respective core competency. Lastly, for competency 2.1.10c, the posttest assessed three of the five CSWE practice behaviors.

The Social Work Department calculated the students' overall core competency scores so that Confident was given a score of four, Somewhat Confident a score of three, Somewhat Unconfident a score of two, and Unconfident a score of one. Each student's practice behavior scores were compiled and averaged into the overall core competency score. On the posttest form only two of the six practice behaviors were listed and rated by students for competency 2.1.1: Professional Identification as a Social Worker; therefore, the student's core competency overall rating was calculated by averaging the two CSWE practice behaviors listed on the posttest form. For example, if a student received a 90% (4) and 70% (2) on the two practice behaviors, then those two scores were added together (5) and divided by 8 (the total possible score), resulting in an average score of 75% for core competency 2.1.1: Professional Identification as a Social Worker. See Appendix D for the students' self-assessment posttest form.

This researcher received an Excel spread sheet from the University's Social Work Department that contained a coded list where students were given an identification code and recorded as 2012-01 through 2012-21 for the 21 students assessed in 2012; 2013-01 through 2013-36 for the 36 students assessed in 2013; and, 2014-01 through 2014-26 for the 26 students assessed in 2014. The Excel spread sheet listed the student's identification code and the assessment scores for all 13 CSWE core competencies 2.1.1-2.1.10d that were assigned to this student by faculty, the field instructor, and the individual student.

The data sets were examined and all *n/a* or *incomplete* scores were eliminated from the dataset. The scores were then entered into the Statistical Package for Social Science® (SPSS), Version 23.0 software program in order to analyze the data.

Analytical Methods

This section outlines the procedures, graphical devices, and statistical methods that were used to analyze each of the research questions explored in this study. For both research questions the dependent variables were the 13 CSWE core competencies. The independent variables for both research questions were faculty assessment, field instructor assessment, and students' self-assessment of BSW student competence.

To answer the first research question, the researcher initially used descriptive statistics (histograms) and frequency analysis to ensure a normal distribution of the dependent variables, to calculate the rank means and standard deviations, and to ensure parametric assumptions were met. According to Leedy & Ormrod (2010), parametric assumptions are met when the dependent variable is interval, the data is collected from a random sample, the dependent variable is normally distributed, and there is homogeneity of the variance. This researcher found that almost all of the dependent variables failed to meet parametric assumptions due to a ceiling effect. For example, in 2012, faculty assigned a score of 100 for competency 2.1.1: Professional Identification as a Social Worker for all 21 students who were assessed. Giving all of the students the same score resulted in no variance in the dependent variable and therefore the dependent variable did not meet parametric assumptions.

For the first research question, this researcher conducted 39 Kruskal-Wallis H. tests in SPSS®, which is the non-parametric alternative to the between-subjects, omnibus

ANOVAs (Ruxton & Beauchamp, 2008). According to Ruxton and Beauchamp, the Kruskal-Wallis test can be used to check for differences between groups when the dependent variable is continuous, but has violated parametric assumptions. Because the ceiling effect existed with many of the dependent variables, the Kruskal-Wallis H. test was utilized in order to determine if there were statistically significant differences in how faculty assessed the 13 core competencies for three different groups of students, how field instructors assessed the 13 core competencies for three different groups of students, and three different groups of students assessed their own competence.

The researcher used the significance level of $p < .05$ to determine if there were statistically significant differences in how faculty, field instructors, and students assessed different groups of students across three years. When statistical significance was found in the Kruskal-Wallis test, this researcher then conducted post hoc pairwise comparisons with a Bonferroni correction to understand where the specific differences existed and to reduce the likelihood of a familywise error (McLaughlin & Sainani, 2014).

To answer the second research question, this researcher reviewed the histograms, rank mean, and standard deviation previously calculated for the first research question, because the same dependent variables (core competencies 2.1.1-2.1.10d) were used. The researcher was also aware that almost all of the dependent variables did not meet parametric assumptions, due to the ceiling effect. For the second research question, this researcher conducted 12 Friedman's tests in SPSS®, which is the non-parametric alternative to within-subjects, omnibus ANOVAs (Pereira et al., 2015). According to Pereira et al., the Friedman's test can be used to check for differences within groups when the dependent variable is continuous, but has violated parametric assumptions. The

Friedman's test was utilized (because the ceiling effect existed with the dependent variables) in order to compare how faculty, field instructors, and students assessed the same students' 13 core competencies across three years.

The researcher used the significance level of $p < .05$ to determine if there were statistically significant differences in how faculty, field instructors, and students assessed the same students. When significance was identified between the groups using the Friedman's test, this researcher then conducted post hoc pairwise comparisons with a Bonferroni correction in order to see which groups were statistically significantly different and to correct for familywise errors (McLaughlin & Sainani, 2014).

A total of 52 statistical tests were performed in order to answer the two research questions in this study. According to Benjamini and Hochberg (2000) there is an increased risk of statistical errors when multiple independent tests are conducted, using the same variables. As a last step, this researcher conducted the False Discovery Rate procedure; however, because Bonferroni's correction was more conservative and less prone to false positives than the False Discovery Rate, this researcher simply reported the False Discovery Rates in Appendix E.

Limitations

Although the current research study offered a number of valuable findings, there were also limitations. In this section, the researcher will explain the limitations that were the most meaningful or had the greatest potential impact. In addition, the researcher will offer how the findings may have been affected by the limitations and how these could be avoided in the future.

The first limitation was the differences in the three assessment tools. Although each assessment tool was designed to evaluate the CSWE's 13 core competencies, there were differences in the three assessment forms that could have impacted the results. The first difference in the forms was the categories that were used to assess student competence. For example, faculty and field instructors assessed performance, while the students' assessed their own confidence levels. Karabacak et al., (2013) found that students' self-efficacy did correlate to students' performance levels; however, this study was designed to evaluate how three groups of assessors evaluated the same students' competence. Future researchers would likely benefit from using the same tool for all three groups of evaluators where performance (and not confidence) was rated.

The second difference in the assessment forms (and a limitation) was the fact that the field instructor evaluation form assessed all 41 CSWE practice behaviors in order to determine the overall 13 core competency scores; however, the faculty and students' assessment tools only evaluated 24 of the 41 practice behaviors. For example, on the students' posttest form and the faculty rubric, only one of the four CSWE practice behaviors was listed for competency 2.1.2: Application of Social Work Ethical Principles. Therefore, a student's 2.1.2 core competency score was based on how a student or faculty member rated one practice behavior, whereas the field instructor's scores were calculated by rating the student using four practice behaviors. According to Bing-Jonnson, Bjørk, Hofoss, Kirkevold, and Foss (2013), evaluators "need to be explicit about their conceptualization of the construct they are measuring, evaluate the appropriateness of competence measurement instruments, and embrace psychometrics as

a methodology for evaluating the validity of competence measurements…" (p. 292). In the future, it would be ideal to ensure all 41 practice behaviors were being rated on all three assessment tools.

Another limitation of this study was the small sample size (one Midwestern University's Social Work Department) and the small number of returned evaluations for students' self-assessment forms. For example, across 2012, 2013, and 2014, faculty and field instructors had a 100% completion rate; however, students' return rates were only 53.7% across three years. In the future, it would be ideal to assess more than one BSW Program and to also create a system to capture and secure more student self-assessment data.

Another limitation of the study was the ceiling effect that occurred with almost all of the dependent variables. For example, in 2012, the faculty evaluator rated all of the students with a score of 100% for competency 2.1.1, indicating that all 21 students were Excellent in identifying themselves as professional social workers. There were also times when a field instructor rated a student with scores of 100% across the entire Field Instructor Assessment form. Lastly, there were many times when students rated their own confidence as 100% across all categories of the posttest assessment form. When raters assessed most participants or most categories as consistently high, the reliability of the results could be questioned for accuracy and validity (Regehr, Regehr, Bogo, & Power, 2007).

A final limitation of this study was the inherent risk of making a Type I, Type II, or familywise error. A total of 52 independent tests were performed using the same independent and dependent variables. Benjamini and Hochberg (2000) warned that

> conducting the analysis for many subgroups and highlighting or reaching decisions about the selected few that come out to be statistically significant raises a danger that the conclusions from the study will not be a result of a real phenomenon but merely reflect the selection of the extremes among the extensively tested noise. (p. 60)

Future researchers might want to consider isolating a few of the 13 CSWE's core competencies in order to reduce the chance of statistical errors and to more closely examine similarities and differences in how students, faculty, and field instructors rate a few of the core competencies.

Summary

This chapter provided a step-by-step examination of the research design, population, data collection, analytical methods, and the limitations of this study. The chapter also provided a theoretical foundation for the methodology employed. The next and final chapter will outline the findings, conclusions, implications, and recommendations of this study.

CHAPTER IV

FINDINGS AND CONCLUSIONS

Introduction

This study examined how different BSW students, faculty, and field instructors assessed students' social work competence across three academic years and at the conclusion of their bachelor-level education. In this final chapter, the results of the data collection and analysis are reported and the research questions are answered. Lastly, the conclusions, implications, and recommendations resulting from this study are presented.

Higher education institutions are required to prove that graduating students are competent and aptly prepared to practice in professional settings (Fletcher et al., 2012). In fact, professional programs, like nursing, education, and social work, are monitored by discipline-specific accrediting bodies who conduct regular site visits to ensure that professional programs incorporate valid methods of assessing students' competence. Professional programs incorporate a variety of assessment techniques in order to ensure student competence; therefore, it is important for higher education institutions to utilize valid and reliable methods for evaluating students' competence in order to ensure graduates are prepared to offer safe, knowledgeable, and skilled professional practice.

The CSWE is the accrediting body for social work programs (2008). BSW programs must ensure that students are proficient in 13 core competency areas which include: 2.1.1 Professional Identity as a Social Worker, 2.1.2 Application of Social Work

Principles, 2.1.3 Application of Critical Thinking, 2.1.4 Diversity in Practice, 2.1.6 Engaging in Research-Informed Practice, 2.1.7 Application of Human Behavior and the Social Environment (HBSE) Knowledge, 2.1.8 Engagement in Policy to Advance Social Well-Being, 2.1.9 Response to Context that Shapes Practice, 2.1.10a Effective Engagement, 2.1.10b Effective Assessment, 2.1.10c Effective Intervention, and 2.1.10d Effective Evaluation (Council of Social Work Education, 2008). There are also 41 specific practice behaviors embedded within the 13 core competencies that BSW students are expected to consistently exhibit in a 400-hour clinical field placement setting prior to graduation. A list of the 13 core competencies and the 41 CSWE practice behaviors can be found in Appendix A.

The CSWE requires social work programs to assess student competence using two data sources. The CSWE requires educational programs to collect and report on field instructor assessment of BSW student competence. In fact, the CSWE views field instructors' evaluation of social work students as the best method of evaluating competence and the signature pedagogy for social work education. Faculty assessment or students' self-assessment of competence are the second most common data sources that social work programs utilize in order to measure students' social work competence (Council on Social Work Education, 2008). In fact, the CSWE views faculty and student evaluation as equally valuable methods of evaluating BSW student proficiencies.

The central purpose of this research study was to examine three years of historical data from a Midwestern social work program to determine the consistency of faculty, field instructors, and BSW students' self-assessment of social work competence at the conclusion of their social work education. This study evaluated how each group of

evaluators (faculty, field instructors, and students) rated different social work students' competence for three different academic years and then how the evaluators assessed the same group of BSW students for the same three academic years. This study was guided by the following two research questions:

1. Is there a difference in how: faculty assess Bachelor of Social Work student competence across three years, field instructors assess student competence across three years, and students self-assess competence across three years?
2. Is there consistency across the raters when comparing how faculty, field instructors, and students assess the same Bachelor of Social Work students' competence across three years?

Findings

Research Question One

What are the differences or similarities in how: faculty assess Bachelor of Social Work student competence across three years, field instructors assess student competence across three years, and students self-assess competence across three years?

Faculty Assessment of BSW Core Competencies.

The first research question evaluated if there were differences in how three different groups of raters (faculty, field instructors, and students) assessed BSW students' 13 core competencies (2.1.1-2.1.10d) across three academic years (2012-2014). Histograms were conducted in order to ensure the variables met parametric assumptions. However, due to a ceiling effect caused when faculty gave multiple students high scores, the dependent variables failed to meet parametric assumptions and the Kruskal-Wallis H test was used rather than the standard between-subjects omnibus Analysis of Variance

(ANOVA) (Ruxton & Beauchamp, 2008). When the Kruskal-Wallis H test indicated statistical significance, a post hoc pairwise comparison with a Bonferroni correction was then performed to understand which groups were statistically significantly different and to correct for familywise errors. Table 1 displays the number of participants, rank mean scores, and standard deviation for faculty assessment of the 13 core competencies for the 2012 academic year. Table 2 displays the number of participants, rank mean scores, and standard deviation for faculty assessment of the 13 core competencies for 2013. And, Table 3 displays the number of participants, rank mean scores, and standard deviation for faculty assessment of the 13 core competencies for 2014.

Table 1

2012 Faculty Assessment of Core Competencies

Competency	*n*	*M*	*SD*
2.1.1 Professional Identification as a Social Worker	21	100.00	.00
2.1.2 Application of Social Work Principles	21	99.76	1.09
2.1.3 Application of Critical Thinking	21	99.29	3.27
2.1.4 Diversity in Practice	20	97.50	6.18
2.1.5 Advancement of Social and Economic Justice	21	98.57	2.80
2.1.6 Engaging in Research-Informed Practice	21	96.90	7.82
2.1.7 Application of HBSE Knowledge	21	99.29	2.39
2.1.8 Engagement in Policy to Advance Social Well-Being	21	95.95	4.90
2.1.9 Response to Context that Shapes Practice	21	90.00	6.25
2.1.10a Effective Engagement	21	100.00	.00
2.1.10b Effective Assessment	21	98.29	4.92
2.1.10c Effective Intervention	21	99.52	2.18
2.1.10d Effective Evaluation	20	97.25	7.16

Table 2

2013 Faculty Assessment of Core Competencies

Competency	*n*	*M*	*SD*
2.1.1 Professional Identification as a Social Worker	36	92.69	3.52
2.1.2 Application of Social Work Principles	36	95.36	4.32
2.1.3 Application of Critical Thinking	35	78.14	14.60
2.1.4 Diversity in Practice	36	90.22	8.47
2.1.5 Advancement in Social and Economic Justice	34	92.12	5.44
2.1.6 Engaging in Research-Informed Practice	35	96.29	6.38
2.1.7 Application of HBSE Knowledge	35	90.86	8.41
2.1.8 Engagement in Policy to Advance Social Well-Being	34	91.53	9.17
2.1.9 Response to Context that Shapes Practice	34	91.53	7.92
2.1.10a Effective Engagement	36	95.11	6.56
2.1.10b Effective Assessment	34	91.56	12.00
2.1.10c Effective Intervention	35	97.14	3.83
2.1.10d Effective Evaluation	35	95.31	4.90

Table 3

2014 Faculty Assessment of Core Competencies

Competency	*n*	*M*	*SD*
2.1.1 Professional Identification as a Social Worker	26	97.85	5.21
2.1.2 Application of Social Work Principles	26	92.88	6.05
2.1.3 Application of Critical Thinking	26	91.81	6.91
2.1.4 Diversity in Practice	26	96.50	7.07
2.1.5 Advancement of Social and Economic Justice	26	93.69	8.52
2.1.6 Engaging in Research-Informed Practice	26	92.08	5.56
2.1.7 Application of HBSE Knowledge	26	95.19	6.70
2.1.8 Engagement in Policy to Advance Social Well-Being	26	93.39	8.98
2.1.9 Response to Context that Shapes Practice	26	97.23	6.07
2.1.10a Effective Engagement	26	98.15	4.56
2.1.10b Effective Assessment	26	92.92	6.64
2.1.10c Effective Intervention	26	98.00	4.12
2.1.10d Effective Evaluation	26	90.92	6.73

The researcher found statistically significant differences in how faculty rated 12 of the 13 core competencies when comparing faculty assessment of BSW students' competence in three different academic years. In fact, the only core competency that did not show a statistically significant difference in how faculty rated students was 2.1.8 Engagement in Policy to Advance Social Well-Being.

Core Competency 2.1.1 Professional Identity as a Social Worker Findings.

When faculty assessed BSW students from the academic years of 2012, 2013, and 2014, the Kruskal-Wallis H test demonstrated that there was a statistically significant difference in how faculty assessed core competency 2.1.1 H (2) = 54.87, $p < .001$. The post hoc pairwise comparison with a Bonferroni correction indicated that there was a statistically significant difference in how faculty evaluated students' competency 2.1.1 when comparing academic years 2012 ($M = 100$, $SD = 0$) to 2013 ($M = 92.69$, $SD = 3.52$) ($p < .001$). There was also a statistically significant difference when comparing 2013 ($M = 92.69$, $SD = 3.52$) to 2014 ($M = 97.85$, $SD = 5.21$) ($p < .001$). Overall, the pairwise comparison indicated that the faculty assessor in 2013 rated students statistically significantly lower on competency 2.1.1 Professional Identification as a Social Worker than the faculty assessor in 2012 and the faculty assessor in 2014.

Core Competency 2.1.2 Application of Social Work Principles Findings.

When faculty assessed BSW students from the academic years of 2012-2014, the Kruskal-Wallis H test demonstrated that there was a statistically significant difference in how faculty assessed core competency 2.1.2 H (2) = 33.32, $p < .001$. The post hoc pairwise comparison with a Bonferroni correction indicated that there was a statistically significant difference in how faculty evaluated students' competency 2.1.2 when comparing academic years 2012 ($M = 99.76$, $SD = 1.09$) to 2014 ($M = 92.88$, $SD = 6.05$) ($p < .001$). There was also a statistically significant difference when comparing 2012 ($M = 99.76$, $SD = 1.09$) to 2013 ($M = 95.36$, $SD = 4.32$) ($p < .001$). Overall, the pairwise

comparison indicated that the faculty assessor in 2012 rated students' statistically significantly higher on competency 2.1.2 Application of Social Work Principles than the faculty assessor in 2013 and the faculty assessor in 2014.

Core Competency 2.1.3 Application of Critical Thinking Findings.

When faculty assessed BSW students from the academic years of 2012-2014, the Kruskal-Wallis H test indicated that there was a statistically significant difference in how faculty assessed core competency 2.1.3 $H(2) = 44.54$, $p < .001$. The post hoc pairwise comparison with a Bonferroni correction indicated that there was a statistically significant difference in how faculty evaluated students' competency 2.1.3 when comparing academic years 2012 ($M = 99.29$, $SD = 3.27$) to 2013 ($M = 78.14$, $SD = 14.60$) ($p < .001$). There was also a statistically significant difference when comparing 2013 ($M = 78.14$, $SD = 14.60$) to 2014 ($M = 91.81$, $SD = 6.91$) ($p = .001$). There was also a statistically significant difference when comparing 2012 ($M = 99.29$, $SD = 3.27$) to 2014 ($M = 91.81$, $SD = 6.91$) ($p = .006$). Overall, the pairwise comparison indicated that the faculty assessor in 2012 rated students statistically significantly high on competency 2.1.3 Application of Critical Thinking; the faculty assessor in 2013 rated students statistically significantly low on competency 2.1.3; and, the faculty assessor in 2014 rated the students between the high assessment scores given by faculty in 2012 and the low assessment scores given by faculty in 2013. Figure 1 presents this difference visually.

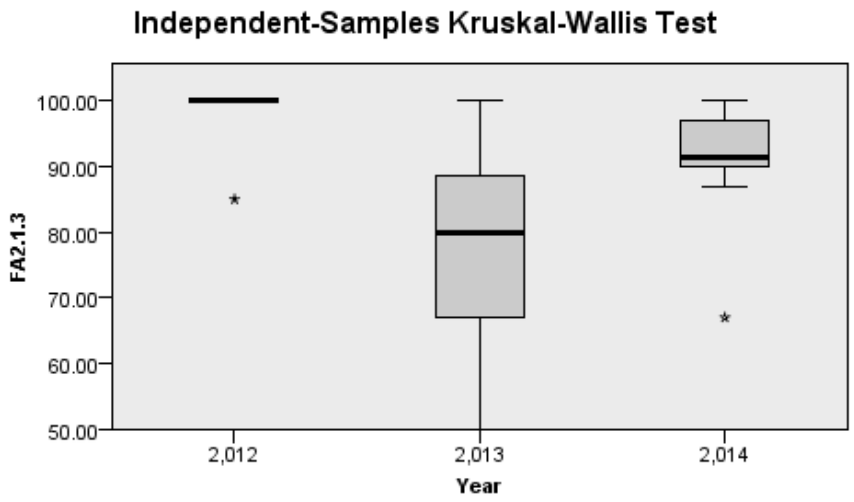

Figure 1. Faculty assessment of core competency 2.1.3 in 2012, 2013, and 2014.

Core Competency 2.1.4 Diversity in Practice Findings.

When faculty assessed BSW students from the academic years of 2012-2014, the Kruskal-Wallis H test indicated that there was a statistically significant difference in how faculty assessed core competency 2.1.4 H (2) = 16.95, $p < .001$. The post hoc pairwise comparison with a Bonferroni correction indicated that there was a statistically significant difference in how faculty evaluated students' competency 2.1.4 when comparing academic years 2012 (M = 97.50, SD = 6.18) to 2013 (M = 90.22, SD = 8.47) (p = .002). There was also a statistically significant difference when comparing 2013 (M = 90.22, SD = 8.47) to 2014 (M = 96.50, SD = 7.07) (p = .002). Overall, the pairwise comparison indicated that the faculty assessor in 2013 rated students' statistically significantly lower on competency 2.1.4 Diversity in Practice than the faculty assessor in 2012 and the faculty assessor in 2014.

Core Competency 2.1.5 Advancement of Social and Economic Justice Findings.

When faculty assessed BSW students from the academic years of 2012-2014, the Kruskal-Wallis H test indicated that there was a statistically significant difference in how

faculty assessed core competency 2.1.5 H (2) = 17.72, $p < .001$. The post hoc pairwise comparison with a Bonferroni correction indicated that there was a statistically significant difference in how faculty evaluated students' competency 2.1.5 when comparing academic years 2012 ($M = 98.57$, $SD = 2.80$) to 2013 ($M = 92.12$, $SD = 5.44$) ($p < .001$). Overall, the pairwise comparison indicated that the faculty assessor in 2012 rated students' statistically significantly higher on competency 2.1.5 Advancement of Social and Economic Justice than the faculty assessor in 2013.

Core Competency 2.1.6 Engaging in Research-Informed Practice Findings.

When faculty assessed BSW students from the academic years of 2012-2014, the Kruskal-Wallis H test indicated that there was a statistically significant difference in how faculty assessed core competency 2.1.6 H (2) = 16.50, $p < .001$. The post hoc pairwise comparison with a Bonferroni correction indicated that there was a statistically significant difference in how faculty evaluated students' competency 2.1.6 when comparing academic years 2013 ($M = 96.29$, $SD = 6.38$) to 2014 ($M = 92.08$, $SD = 5.56$) ($p = .005$). There was also a statistically significant difference when comparing 2012 ($M = 96.90$, $SD = 7.82$) to 2014 ($M = 92.08$, $SD = 5.56$) ($p < .001$). Overall, the pairwise comparison indicated that the faculty assessor in 2014 rated students' statistically significantly lower on competency 2.1.6 Engaging in Research-Informed Practice than the faculty assessor in 2012 and the faculty assessor in 2013.

Core Competency 2.1.7 Application of Human Behavior and the Social Environment Knowledge Findings.

When faculty assessed BSW students from the academic years of 2012-2014, the Kruskal-Wallis H test indicated that there was a statistically significant difference in how

faculty assessed core competency 2.1.7 H (2) = 19.60, $p < .001$. The post hoc pairwise comparison with a Bonferroni correction indicated that there was a statistically significant difference in how faculty evaluated students' competency 2.1.7 when comparing academic years 2012 ($M = 99.29$, $SD = 2.39$) to 2013 ($M = 90.86$, $SD = 8.41$) ($p < .001$). Overall, the pairwise comparison indicated that the faculty assessor in 2012 rated students' statistically significantly higher on competency 2.1.7 Application of Human Behavior and the Social Environment Knowledge than the faculty assessor in 2013.

Core Competency 2.1.9 Response to Context that Shapes Practice Findings.

When faculty assessed BSW students from the academic years of 2012-2014, the Kruskal-Wallis H test indicated that there was a statistically significant difference in how faculty assessed core competency 2.1.9 H (2) = 19.80, $p < .001$. The post hoc pairwise comparison with a Bonferroni correction indicated that there was a statistically significant difference in how faculty evaluated students' competency 2.1.9 when comparing academic years 2012 ($M = 90.00$, $SD = 6.25$) to 2014 ($M = 97.23$, $SD = 6.07$) ($p < .001$). There was also a statistically significant difference when comparing 2013 ($M = 91.53$, $SD = 7.92$) to 2014 ($M = 97.23$, $SD = 6.07$) ($p = .001$). Overall, the pairwise comparison indicated that the faculty assessor in 2014 rated students' statistically significantly higher on competency 2.1.9 Response to Context that Shapes Practice than the faculty assessor in 2012 and the faculty assessor in 2013.

Core Competency 2.1.10a Effective Engagement Findings.

When faculty assessed BSW students from the academic years of 2012-2014, the Kruskal-Wallis H test indicated that there was a statistically significant difference in how

faculty assessed core competency 2.1.10a H (2) = 16.30, $p < .001$. The post hoc pairwise comparison with a Bonferroni correction indicated that there was a statistically significant difference in how faculty evaluated students' competency 2.1.10a when comparing academic years 2012 ($M = 100$, $SD = 0$) to 2013 ($M = 95.11$, $SD = 6.56$) ($p < .001$). There was also a statistically significant difference when comparing 2013 ($M = 95.11$, $SD = 6.56$) to 2014 ($M = 98.15$, $SD = 4.56$) ($p = .023$). Overall, the pairwise comparison indicated that the faculty assessor in 2013 rated students' statistically significantly lower on competency 2.1.10a Effective Engagement than the faculty assessor in 2012 and the faculty assessor in 2014.

Core Competency 2.1.10b Effective Assessment Findings.

When faculty assessed BSW students from the academic years of 2012-2014, the Kruskal-Wallis H indicated that there was a statistically significant difference in how faculty assessed core competency 2.1.10b H (2) = 10.50, $p = .005$. The post hoc pairwise comparison with a Bonferroni correction indicated that there was a statistically significant difference in how faculty evaluated students' competency 2.1.10b when comparing academic years 2012 ($M = 98.29$, $SD = 4.92$) to 2013 ($M = 91.56$, $SD = 12.00$) ($p = .024$). There was also a statistically significant difference when comparing 2012 ($M = 98.29$, $SD = 4.92$) to 2014 ($M = 92.92$, $SD = 6.64$) ($p = .007$). Overall, the pairwise comparison indicated that the faculty assessor in 2012 rated students' statistically significantly higher on competency 2.1.10b Effective Assessment than the faculty assessor in 2013 and the faculty assessor in 2014.

Core Competency 2.1.10c Effective Intervention Findings.

When faculty assessed BSW students from the academic years of 2012-2014, the Kruskal-Wallis H test indicated that there were statistically significant differences in how faculty assessed core competence 2.1.10c H (2) = 8.49, $p = .014$. The post hoc pairwise comparison with a Bonferroni correction indicated that there was a statistically significant difference in how faculty evaluated students' competency 2.1.10c when comparing academic years 2012 ($M = 99.52$, $SD = 2.18$) to 2013 ($M = 97.14$, $SD = 3.834$) ($p = .011$). Overall, the pairwise comparison indicated that the faculty assessor in 2012 rated students' statistically significantly higher on competency 2.1.10c Effective Intervention than the faculty assessor in 2013.

Core Competency 2.1.10d Effective Evaluation Findings.

When faculty assessed BSW students from the academic years of 2012-2014, the Kruskal-Wallis H test indicated that there was a statistically significant difference in how faculty assessed core competency 2.1.10d H (2) = 15.71, $p < .001$. The post hoc pairwise comparison with a Bonferroni correction indicated that there was a statistically significant difference in how faculty evaluated students' competency 2.1.10d when comparing academic years 2012 ($M = 97.25$, $SD = 7.16$) to 2014 ($M = 90.92$, $SD = 6.73$) ($p < .001$). Overall, the pairwise comparison indicated that the faculty assessor in 2012 rated students' statistically significantly higher on competency 2.1.10d Effective Evaluation than the faculty assessor in the 2014 academic year. Table 4 provides a summary of the Kruskal-Wallis H test results related to faculty assessment of the 13 social work core competencies across three academic years. Table 5 provides a visual

display of the Kruskal-Wallis H tests with the Bonferroni correction results related to faculty assessment of the 13 social work core competencies across three academic years.

Table 4

Faculty: Kruskal-Wallis H Test Results of Core Competencies

Competency	H	Sig
2.1.1 Professional Identification as a Social Worker	54.87	<.001*
2.1.2 Application of Social Work Principles	33.32	<.001*
2.1.3 Application of Critical Thinking	44.54	<.001*
2.1.4 Diversity in Practice	16.95	<.001*
2.1.5 Advancement of Social and Economic Justice	17.72	<.001*
2.1.6 Engaging in Research-Informed Practice	16.50	<.001*
2.1.7 Application of HBSE Knowledge	19.60	<.001*
2.1.8 Engagement in Policy to Advance Social Well-Being	2.74	.254
2.1.9 Response to Context that Shapes Practice	19.80	<.001*
2.1.10a Effective Engagement	16.30	<.001*
2.1.10b Effective Assessment	10.50	.005*
2.1.10c Effective Intervention	8.49	.014*
2.1.10d Effective Evaluation	15.71	<.001*

*$p < 0.05$

Table 5

Faculty: Post hoc Pairwise Comparisons with a Bonferroni Correction

Competency	Years	H	Std Error	Std Test Stat	Sig
2.1.1	2012 to 2013	42.09	6.22	6.76	< .001*
	2012 to 2014	10.37	6.65	1.56	.357
	2013 to 2014	-31.72	5.83	-5.44	< .001*
2.1.2	2012 to 2013	29.38	6.44	4.56	< .001*
	2012 to 2014	38.21	6.89	5.55	< .001*
	2013 to 2014	8.33	6.04	1.46	.431
2.1.3	2012 to 2013	42.39	6.42	6.60	< .001*
	2012 to 2014	21.11	6.82	3.09	.006*
	2013 to 2014	-21.27	6.02	-3.53	.001*
2.1.4	2012 to 2013	20.72	5.97	3.47	.002*
	2012 to 2014	2.06	6.37	.32	1.000
	2013 to 2014	-18.67	5.51	-3.39	.002*
2.1.5	2012 to 2013	26.21	6.25	4.20	< .001*
	2012 to 2014	14.31	6.61	2.17	.091
	2013 to 2014	-11.91	5.87	-2.03	.127
2.1.6	2012 to 2013	6.61	6.10	1.08	.835
	2012 to 2014	24.66	6.48	3.80	< .001*
	2013 to 2014	18.05	5.72	3.15	.005*

Competency	Years	H	Std Error	Std Test Stat	Sig
2.1.7	2012 to 2013	26.31	5.98	4.40	< .001*
	2012 to 2014	13.85	6.36	2.18	.088
	2013 to 2014	-12.46	5.61	-2.22	.079
2.1.9	2012 to 2013	-6.43	6.35	-1.01	.934
	2012 to 2014	-27.57	6.71	-4.11	< .001*
	2013 to 2014	-21.14	5.96	-3.55	.001*
2.1.10a	2012 to 2013	19.36	5.05	3.83	< .001*
	2012 to 2014	6.71	5.40	1.24	.641
	2013 to 2014	-12.65	4.73	-2.67	.023*
2.1.10b	2012 to 2013	15.86	5.97	2.65	.024*
	2012 to 2014	19.32	6.32	3.06	.007*
	2013 to 2014	3.46	5.61	.62	1.000
2.1.10c	2012 to 2013	15.11	5.20	2.91	.011*
	2012 to 2014	8.71	5.52	1.58	.344
	2013 to 2014	-6.40	4.87	-1.31	.567
2.1.10d	2012 to 2013	12.91	6.31	2.05	.122
	2012 to 2014	26.40	6.69	3.94	< .001*
	2013 to 2014	13.49	5.83	2.32	.062

*$p < 0.05$

Field Instructors' Assessment of BSW Core Competencies.

The researcher used the Kruskal-Wallis H test to analyze the rank score means and standard deviation for all 13 social work core competencies (2.1.1 through 2.1.10d) in order to examine if field instructors assessed students from the academic years of 2012, 2013, and 2014 differently in the final semester of their BSW program. A ceiling effect was created when field instructors rated multiple students high; therefore, several of the dependent variables failed to meet parametric assumptions and the Kruskal-Wallis H test was required rather than using the standard between-subjects omnibus ANOVA (Ruxton & Beauchamp, 2008).

The researcher found no statistically significant differences in how field instructors rated the 13 core competencies when comparing field instructors' assessment of BSW students' competence in three different academic years. Table 6 provides the number of participants that were assessed by field instructors in 2012, the rank mean scores, and the standard deviation. Table 7 provides the number of participants that were assessed by field instructors in 2013, the rank mean scores, and the standard deviation. Table 8 provides the number of participants that were assessed by field instructors in 2014, the rank mean scores, and the standard deviation. Table 9 provides each of the Kruskal-Wallis H test results related to field instructors' assessment of the 13 social work core competencies across three academic years.

Table 6

2012 Field Instructors' Assessment of Core Competencies

Competency	*n*	*M*	*SD*
2.1.1 Professional Identification as a Social Worker	19	93.74	8.82
2.1.2 Application of Social Work Principles	19	93.76	7.86
2.1.3 Application of Critical Thinking	19	92.16	9.44
2.1.4 Diversity in Practice	19	93.16	9.94
2.1.5 Advancement of Social and Economic Justice	19	93.49	8.60
2.1.6 Engaging in Research-Informed Practice	19	90.89	10.87
2.1.7 Application of HBSE Knowledge	19	93.53	9.59
2.1.8 Engagement in Policy to Advance Social Well-Being	19	90.74	10.77
2.1.9 Response to Context that Shapes Practice	19	93.53	5.59
2.1.10a Effective Engagement	19	93.00	8.95
2.1.10b Effective Assessment	19	90.16	9.91
2.1.10c Effective Intervention	19	92.11	8.71
2.1.10d Effective Evaluation	18	91.67	12.13

Table 7

2013 Field Instructors' Assessment of Core Competencies

Competency	*n*	*M*	*SD*
2.1.1 Professional Identification as a Social Worker	36	95.67	7.56
2.1.2 Application of Social Work Principles	36	94.06	9.58
2.1.3 Application of Critical Thinking	36	94.94	9.77
2.1.4 Diversity in Practice	36	94.28	11.11
2.1.5 Advancement of Social and Economic Justice	36	91.44	12.23
2.1.6 Engaging in Research-Informed Practice	36	94.94	9.53
2.1.7 Application of HBSE Knowledge	36	94.47	10.09
2.1.8 Engagement in Policy to Advance Social Well-Being	36	89.19	13.93
2.1.9 Response to Context that Shapes Practice	36	94.31	9.08
2.1.10a Effective Engagement	36	94.42	9.82
2.1.10b Effective Assessment	36	93.78	10.50
2.1.10c Effective Intervention	36	92.17	10.67
2.1.10d Effective Evaluation	35	92.14	11.78

Table 8

2014 Field Instructors' Assessment of Core Competencies

Competency	*n*	*M*	*SD*
2.1.1 Professional Identification as a Social Worker	26	92.08	8.59
2.1.2 Application of Social Work Principles	26	90.19	11.60
2.1.3 Application of Critical Thinking	25	89.36	12.59
2.1.4 Diversity in Practice	25	92.04	10.76
2.1.5 Advancement of Social and Economic Justice	25	90.68	11.13
2.1.6 Engaging in Research-Informed Practice	25	89.12	11.00
2.1.7 Application of HBSE Knowledge	25	89.08	12.62
2.1.8 Engagement in Policy to Advance Social Well-Being	26	87.85	12.57
2.1.9 Response to Context that Shapes Practice	25	92.08	10.72
2.1.10a Effective Engagement	25	91.32	8.60
2.1.10b Effective Assessment	26	88.42	12.16
2.1.10c Effective Intervention	25	89.24	10.40
2.1.10d Effective Evaluation	23	86.96	12.77

Table 9

Field Instructors: Kruskal-Wallis H Test Results of Core Competencies

Competency	H	Sig
2.1.1 Professional Identification as a Social Worker	4.20	.123
2.1.2 Application of Social Work Principles	1.96	.375
2.1.3 Application of Critical Thinking	4.02	.134
2.1.4 Diversity in Practice	1.22	.545
2.1.5 Advancement of Social and Economic Justice	.35	.840
2.1.6 Engaging in Research-Informed Practice	5.73	.057
2.1.7 Application of HBSE Knowledge	3.58	.167
2.1.8 Engagement in Policy to Advance Social Well-Being	.82	.664
2.1.9 Response to Context that Shapes Practice	.56	.757
2.1.10a Effective Engagement	3.30	.192
2.1.10b Effective Assessment	4.43	.109
2.1.10c Effective Intervention	2.12	.346
2.1.10d Effective Evaluation	2.73	.256

*$p < 0.05$

Students' Self-Assessment of BSW Core Competencies.

The researcher used the Kruskal-Wallis H test to analyze the rank means and standard deviation for all 13 social work core competencies (2.1.1 through 2.1.10d) in order to examine if BSW students from the academic years of 2012, 2013, and 2014 assessed their own social work competence differently in the final semester of their academic program. A ceiling effect was created when multiple students rated their own competence high; therefore, several of the dependent variables failed to meet parametric assumptions and the Kruskal-Wallis H test was required rather than using the standard between-subjects omnibus ANOVA (Ruxton & Beauchamp, 2008).

When comparing students' self-assessment across three different academic years, the researcher found that there was only a statistically significant difference in how students rated their own competence on two of the 13 core competencies: 2.1.7 Application of Human Behavior and the Social Environment Knowledge; and, 2.1.10b Effective Assessment. Table 10 provides the number of students who self-assessed their competence in 2012, the rank mean scores, and the standard deviation. Table 11 provides the number of students who self-assessed their competence in 2013, the rank mean scores, and the standard deviation. Table 12 provides the number of students who assessed their own competence in 2014, the rank mean scores, and the standard deviation.

Table 10

2012 Students' Self-Assessment of Core Competencies

Competency	*n*	*M*	*SD*
2.1.1 Professional Identification as a Social Worker	9	98.44	4.67
2.1.2 Application of Social Work Principles	8	96.88	8.84
2.1.3 Application of Critical Thinking	9	94.44	11.02
2.1.4 Diversity in Practice	9	98.44	4.67
2.1.5 Advancement of Social and Economic Justice	9	100.00	.00
2.1.6 Engaging in Research-Informed Practice	8	100.00	.00
2.1.7 Application of HBSE Knowledge	9	97.22	8.33
2.1.8 Engagement in Policy to Advance Social Well-Being	9	95.67	9.03
2.1.9 Response to Context that Shapes Practice	9	100.00	.00
2.1.10a Effective Engagement	9	97.22	5.95
2.1.10b Effective Assessment	9	98.00	4.24
2.1.10c Effective Intervention	9	93.56	7.04
2.1.10d Effective Evaluation	9	94.44	11.02

Table 11

2013 Students' Self-Assessment of Core Competencies

Competency	*n*	*M*	*SD*
2.1.1 Professional Identification as a Social Worker	19	99.37	2.75
2.1.2 Application of Social Work Principles	19	94.74	10.47
2.1.3 Application of Critical Thinking	19	93.42	11.31
2.1.4 Diversity in Practice	19	100.00	.00
2.1.5 Advancement of Social and Economic Justice	19	99.37	2.75
2.1.6 Engaging in Research-Informed Practice	19	98.68	5.74
2.1.7 Application of HBSE Knowledge	19	94.74	10.47
2.1.8 Engagement in Policy to Advance Social Well-Being	19	96.21	5.73
2.1.9 Response to Context that Shapes Practice	19	97.37	7.88
2.1.10a Effective Engagement	18	98.67	3.07
2.1.10b Effective Assessment	18	98.28	2.74
2.1.10c Effective Intervention	19	97.84	4.67
2.1.10d Effective Evaluation	18	97.37	7.88

Table 12

2014 Students' Self-Assessment of Core Competencies

Competency	*n*	*M*	*SD*
2.1.1 Professional Identification as a Social Worker	17	96.41	9.48
2.1.2 Application of Social Work Principles	17	95.59	9.82
2.1.3 Application of Critical Thinking	17	91.18	12.31
2.1.4 Diversity in Practice	17	99.29	2.91
2.1.5 Advancement of Social and Economic Justice	17	99.29	2.91
2.1.6 Engaging in Research-Informed Practice	17	94.12	10.93
2.1.7 Application of HBSE Knowledge	17	83.82	12.31
2.1.8 Engagement in Policy to Advance Social Well-Being	17	95.71	7.48
2.1.9 Response to Context that Shapes Practice	17	92.65	11.74
2.1.10a Effective Engagement	17	96.59	5.98
2.1.10b Effective Assessment	17	93.24	5.70
2.1.10c Effective Intervention	17	94.18	7.69
2.1.10d Effective Evaluation	17	95.59	9.82

Core Competency 2.1.7 Application of Human Behavior and the Social Environment Knowledge.

When students self-assessed their competence from the academic years of 2012, 2013, and 2014, the Kruskal-Wallis H test indicated that there was a statistically significant difference in how students self-assessed core competency 2.1.7 H (2) = 10.16,

p = .006. The post hoc pairwise comparison with a Bonferroni correction indicated that there was a statistically significant difference in how students evaluated their own competency 2.1.7 when comparing academic years 2013 (M = 94.74, SD = 10.47) to 2014 (M = 83.82, SD = 12.31) (p = .021). There was also a statistically significant difference when comparing 2012 (M = 97.22, SD = 8.33) to 2014 (M = 83.82, SD = 12.31) (p = .022). Overall, the pairwise comparison indicated that the students in 2014 rated their own competence related to 2.1.7 Application of Human Behavior and the Social Environment Knowledge statistically significantly lower than the students rated themselves in 2012 and the students rated themselves in 2013.

Core Competency 2.1.10b Effective Assessment.

When faculty assessed BSW students from the academic years of 2012-2014, the Kruskal-Wallis H test indicated that there was a statistically significant difference in how students self-assessed competency 2.1.10b H (2) = 9.53, p = .009. The post hoc pairwise comparison with a Bonferroni correction indicated that there was a statistically significant difference in how students evaluated their own competency 2.1.10b when comparing academic years 2012 (M = 98.00, SD = 4.24) to 2014 (M = 93.24, SD = 5.70) (p = .047). There was also a statistically significant difference when comparing 2013 (M = 98.28, SD = 2.74) to 2014 (M = 93.24, SD = 5.70) (p = .017). Overall, the pairwise comparison indicated that the students in 2014 rated their own competence related to 2.1.10b Effective Assessment statistically significantly lower than the students rated themselves in 2012 and the students rated themselves in 2013. Table 13 provides the Kruskal-Wallis H test results of students' self-assessment of the 13 social work core

competencies across three academic years. Table 14 provides a summary of the post hoc pairwise comparisons with a Bonferroni correction for students' assessment of the 13 social work core competencies across three academic years.

Table 13

Students: Kruskal-Wallis H Test Results of Core Competencies

Competency	H	Sig
2.1.1 Professional Identification as a Social Worker	1.41	.494
2.1.2 Application of Social Work Principles	.28	.871
2.1.3 Application of Critical Thinking	.58	.747
2.1.4 Diversity in Practice	1.92	.383
2.1.5 Advancement of Social and Economic Justice	.52	.771
2.1.6 Engaging in Research-Informed Practice	4.13	.127
2.1.7 Application of HBSE Knowledge	10.16	.006*
2.1.8 Engagement in Policy to Advance Social Well-Being	.02	.990
2.1.9 Response to Context that Shapes Practice	4.41	.110
2.1.10a Effective Engagement	1.02	.601
2.1.10b Effective Assessment	9.53	.009*
2.1.10c Effective Intervention	4.21	.122
2.1.10d Effective Evaluation	.71	.701

*$p < 0.05$

Table 14

Students: Post hoc Pairwise Comparison with a Bonferroni Correction

Competency	Years	H	Std Error	Std Test Stat	Sig
2.1.7	2012 to 2013	2.24	4.41	.51	1.000
	2012 to 2014	12.06	4.49	2.69	.022*
	2013 to 2014	9.82	3.64	2.70	.021*
2.1.10b	2012 to 2013	.75	4.74	.16	1.000
	2012 to 2014	11.57	4.78	2.42	.047*
	2013 to 2014	10.82	3.92	2.76	.017*

*$p < 0.05$

A total of 39 statistical tests were performed in order to answer research question one. According to Benjamini and Hochberg (2000) there is an increased risk of statistical errors when multiple independent tests are conducted, using the same variables. As a last step, this researcher conducted the False Discovery Rate procedure; however, because Bonferroni's correction was more conservative and less prone to false positives than the False Discovery Rate, this researcher simply reported the False Discovery Rates in Appendix E.

Research Question Two

What is the consistency across the raters when comparing how faculty, field instructors, and students assess the same Bachelor of Social Work students' competence across three years?

The second research question evaluated if there were differences across the raters when comparing how faculty, field instructors, and students assessed the same BSW students' 13 social work core competencies. Histograms were conducted to ensure the variables met parametric assumptions; however, due to a ceiling effect (created when faculty, field instructors, and students gave many students high assessment scores), the dependent variables failed to meet parametric assumptions. The researcher used the Friedman's test to analyze the data, rather than a within-subject ANOVA (Pereira et al., 2015). When the Friedman's tests revealed statistically significant differences, a post hoc pairwise comparison with a Bonferroni correction was performed to correct for familywise error and to better understand the statistical differences found when comparing faculty, field instructors, and students' assessment of the same BSW students' 13 core competencies. Table 15 displays the number of participants, rank mean scores, and standard deviation for faculty assessment of the 13 core competencies across three academic years. Table 16 displays the number of participants, rank mean scores, and standard deviation for field instructors' assessment of the 13 core competencies across three academic years. And, Table 17 displays the number of participants, rank mean scores, and standard deviation for the students' assessment of their own 13 core competencies across three academic years.

Table 15

2012-2014 Faculty Assessment of Core Competencies

Competency	*n*	*M*	*SD*
2.1.1 Professional Identification as a Social Worker	44	97.25	3.77
2.1.2 Application of Social Work Principles	43	96.26	4.09
2.1.3 Application of Critical Thinking	43	86.26	16.01
2.1.4 Diversity in Practice	43	95.81	6.28
2.1.5 Advancement of Social and Economic Justice	43	93.91	6.53
2.1.6 Engaging in Research-Informed Practice	42	94.95	5.64
2.1.7 Application of HBSE Knowledge	43	95.28	7.60
2.1.8 Engagement in Policy to Advance Social Well-Being	44	94.14	7.18
2.1.9 Response to Context that Shapes Practice	43	94.02	8.11
2.1.10a Effective Engagement	43	98.33	4.02
2.1.10b Effective Assessment	43	93.84	10.00
2.1.10c Effective Intervention	42	98.52	3.16
2.1.10d Effective Evaluation	40	94.35	5.96

Table 16

2012-2014 Field Instructors' Assessment of Core Competencies

Competency	*n*	*M*	*SD*
2.1.1 Professional Identification as a Social Worker	44	93.09	8.25
2.1.2 Application of Social Work Principles	43	92.06	10.34
2.1.3 Application of Critical Thinking	43	92.49	11.43
2.1.4 Diversity in Practice	43	92.49	11.62
2.1.5 Advancement of Social and Economic Justice	43	90.77	11.96
2.1.6 Engaging in Research-Informed Practice	42	93.64	9.56
2.1.7 Application of HBSE Knowledge	43	93.37	10.30
2.1.8 Engagement in Policy to Advance Social Well-Being	44	88.86	13.22
2.1.9 Response to Context that Shapes Practice	43	93.80	9.50
2.1.10a Effective Engagement	43	93.05	9.11
2.1.10b Effective Assessment	43	90.72	11.16
2.1.10c Effective Intervention	42	89.88	9.97
2.1.10d Effective Evaluation	40	90.00	12.40

Table 17

2012-2014 Students' Self-Assessment of Core Competencies

Competency	*n*	*M*	*SD*
2.1.1 Professional Identification as a Social Worker	44	98.02	6.51
2.1.2 Application of Social Work Principles	43	95.35	9.84
2.1.3 Application of Critical Thinking	43	92.44	11.62
2.1.4 Diversity in Practice	43	99.40	2.78
2.1.5 Advancement of Social and Economic Justice	43	99.72	1.83
2.1.6 Engaging in Research-Informed Practice	42	97.62	7.43
2.1.7 Application of HBSE Knowledge	43	91.28	12.06
2.1.8 Engagement in Policy to Advance Social Well-Being	44	96.14	6.88
2.1.9 Response to Context that Shapes Practice	43	95.93	9.34
2.1.10a Effective Engagement	43	97.51	5.00
2.1.10b Effective Assessment	43	96.19	4.96
2.1.10c Effective Intervention	42	95.48	6.72
2.1.10d Effective Evaluation	40	95.63	9.62

The researcher assessed the rank mean scores and standard deviation for faculty, field instructors, and students' self-assessment when all three raters evaluated the same students' 13 core competencies (2.1.1 through 2.1.10d) for the academic years of 2012, 2013, and 2014. The researcher found statistically significant differences in how faculty, field instructors, and students rated six of the 13 core competencies: 2.1.1 Professional

Identification as a Social Worker, 2.1.4 Diversity in Practice, 2.1.5 Advancement of Social and Economic Justice, 2.1.6 Engaging in Research-Informed Practice, 2.1.8 Engagement in Policy to Advance Social Well-Being, and 2.1.10c Effective Intervention.

Core Competency 2.1.1 Professional Identification as a Social Worker.

When students, faculty, and field instructors assessed BSW students' competence across 2012-2014, the Friedman's test demonstrated that there was a statistically significant difference in how raters assessed students' competence 2.1.1 χ^2 (2) = 16.33, p < .001. A post hoc pairwise comparison with a Bonferroni correction indicated that there was a statistically significant difference in how field instructors (M = 93.09, SD = 8.25) and students (M = 98.02, SD = 6.51) (p = .003) evaluated competency 2.1.1 for the same group of students across three years. Overall, the pairwise comparison indicated that students rated themselves statistically significantly higher than field instructors rated the same group of students' competency 2.1.1 Professional Identification as a Social Worker across three years.

Core Competency 2.1.4 Diversity in Practice.

When students, faculty, and field instructors assessed BSW students' competence across 2012-2014, the Friedman's test demonstrated that there was a statistically significant difference in how raters assessed students' competence 2.1.4 χ^2 (2) = 14.06, p = .001. A post hoc pairwise comparison with a Bonferroni correction indicated that there was a statistically significant difference in how field instructors (M = 92.49, SD = 11.62) and students (M = 99.40, SD = 2.78) (p = .025) evaluated competency 2.1.4 for the same

group of students across three years. Overall, the pairwise comparison indicated that students rated themselves statistically significantly higher than field instructors rated the same group of students' competency 2.1.4 Diversity in Practice across three years.

Core Competency 2.1.5 Advancement of Social and Economic Justice.

When students, faculty, and field instructors assessed BSW students' competence across 2012-2014, the Friedman's test indicated that there was a statistically significant difference in how raters assessed students' competence 2.1.5 χ^2 (2) = 26.38, $p < .001$. A post hoc pairwise comparison with a Bonferroni correction indicated that there was a statistically significant difference in how field instructors (M = 90.77, SD = 11.96) and students (M = 99.72, SD = 1.83) ($p < .001$) evaluated competency 2.1.5 for the same group of students across three years. The pairwise comparison also indicated that there was a statistically significant difference in how faculty (M = 93.91, SD = 6.53) and students (M = 99.72, SD = 1.83) ($p = .003$) evaluated competency 2.1.5 for the same group of students across three years. Overall, the pairwise comparison indicated that students rated themselves statistically significantly higher on competency 2.1.5 Advancement of Social and Economic Justice than field instructors or faculty rated the same students' competency 2.1.5 across three years.

Core Competency 2.1.6 Engaging in Research-Informed Practice.

When students, faculty, and field instructors assessed BSW students' competence across 2012-2014, the Friedman's test indicated that there was a statistically significant difference in how raters assessed students' competence 2.1.6 χ^2 (2) = 11.89, $p = .003$. A post hoc pairwise comparison with a Bonferroni correction indicated that there was a statistically significant difference in how faculty (M = 94.95, SD = 5.64) and students (M

= 97.02, *SD* = 7.43) (*p* = .026) evaluated competency 2.1.6 for the same group of students across three years. Overall, the pairwise comparison indicated that students rated themselves statistically significantly higher than faculty rated the same group of students' competency 2.1.6 Engaging in Research-Informed Practice across three years.

Core Competency 2.1.8 Engagement in Policy to Advance Social Well-Being.

When students, faculty, and field instructors assessed BSW students' competence across 2012-2014, the Friedman's test indicated that there was a statistically significant difference in how raters assessed students' competence 2.1.8 χ^2 (2) = 8.71, *p* = .013. A post hoc pairwise comparison with a Bonferroni correction indicated that there was a statistically significant difference in how field instructors (*M* = 88.86, *SD* = 13.22) and students (*M* = 96.14, *SD* = 6.88) (*p* = .037) evaluated competency 2.1.8 for the same group of students across three years. Overall, the pairwise comparison indicated that students rated themselves statistically significantly higher than field instructors rated the same group of students' competency 2.1.8 Engagement in Policy to Advance Social Well-Being across three years. Figure 2 presents these details.

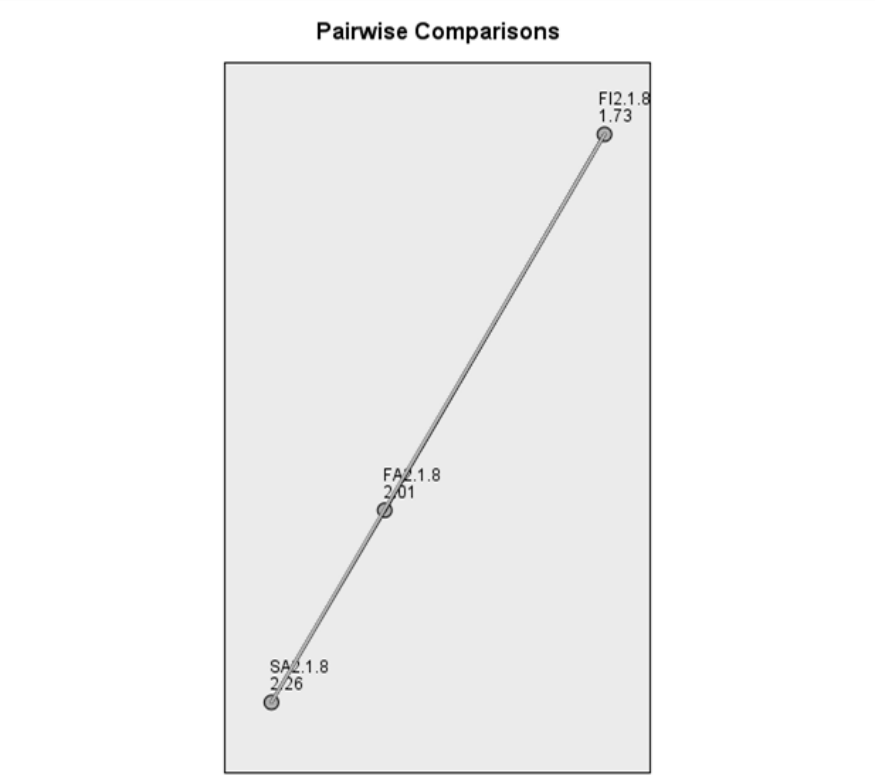

Figure 2. Post hoc pairwise comparison demonstrating how students and field instructors rate core competency 2.1.8.

Core Competency 2.1.10c Effective Intervention.

When students, faculty, and field instructors assessed BSW students' competence across 2012-2014, the Friedman's test indicated that there was a statistically significant difference in how raters assessed students' competence 2.1.10c χ^2 (2) = 14.93, p = .001. A post hoc pairwise comparison with a Bonferroni correction indicated that there was a statistically significant difference in how field instructors (M = 89.88, SD = 9.97) and faculty (M = 98.52, SD = 3.16) (p = .003) evaluated competency 2.1.10c for the same group of students across three years. Overall, the pairwise comparison indicated that faculty rated students statistically significantly higher than field instructors rated the same group of students' competency 2.1.10c Effective Intervention across three years. Table 18 provides a summary of the Friedman's test results related to differences in how raters

assessed the same students' core competence when examining three academic years and illustrates statistically significant findings indicate a difference in how raters assessed the following core competencies: 2.1.1, 2.1.2, 2.1.4, 2.1.5, 2.1.6, 2.1.8, 2.1.9, 2.1.10a, 2.1.10c., and 2.1.10d. Table 19 provides a summary of the Post hoc pairwise comparisons with the Bonferroni correction results and displays the specific pairwise comparisons. It should be noted that when the Bonferroni correction was applied, core competencies 2.1.2, 2.1.10a, and 2.1.10d no longer met the significance level of $p < .05$.

Table 18

Comparing Raters: Friedman's Test Results of Core Competencies

Competency	χ^2	Sig
2.1.1 Professional Identification as a Social Worker	16.33	< .001*
2.1.2 Application of Social Work Principles	8.35	.015*
2.1.3 Application of Critical Thinking	5.13	.077
2.1.4 Diversity in Practice	14.06	.001*
2.1.5 Advancement of Social and Economic Justice	26.38	< .001*
2.1.6 Engaging in Research-Informed Practice	11.89	.003*
2.1.7 Application of HBSE Knowledge	.40	.817
2.1.8 Engagement in Policy to Advance Social Well-Being	8.71	.013*
2.1.9 Response to Context that Shapes Practice	6.34	.042*
2.1.10a Effective Engagement	9.38	.009*
2.1.10b Effective Assessment	3.53	.171
2.1.10c Effective Intervention	14.93	.001*
2.1.10d Effective Evaluation	6.80	.033*

*$p < 0.05$

Table 19

Comparing Raters: Post hoc Pairwise Comparisons with a Bonferroni Correction

Competency	Raters	$\chi 2$	Std Error	Std Test Stat	Sig
2.1.1	Field to Student	-.71	.21	-3.31	.003*
	Field to Faculty	.25	.21	1.17	.723
	Faculty to Student	-.46	.21	-2.13	.100
2.1.2	Field to Student	-.48	.22	-2.21	.081
	Field to Faculty	.01	.22	.05	1.000
	Faculty to Student	-.47	.22	-2.16	.093
2.1.4	Field to Student	-.57	.22	-2.64	.025*
	Field to Faculty	.13	.22	.59	1.000
	Faculty to Student	-.44	.22	-2.05	.121
2.1.5	Field to Student	-.83	.22	-3.83	< .001*
	Field to Faculty	.12	.22	.54	1.000
	Faculty to Student	-.71	.22	-3.29	.003*
2.1.6	Field to Student	-.43	.22	-1.96	.149
	Field to Faculty	-.14	.22	-.66	1.000
	Faculty to Student	-.57	.22	-2.62	.026*
2.1.8	Field to Student	-.53	.21	-2.51	.037*
	Field to Faculty	.28	.21	1.33	.548
	Faculty to Student	-.25	.21	-1.17	.723

Competency	Raters	$\chi 2$	Std Error	Std Test Stat	Sig
2.1.9	Field to Student	-.28	.22	-1.29	.587
	Field to Faculty	-.14	.22	-.65	1.000
	Faculty to Student	-.42	.22	-1.94	.157
2.1.10a	Field to Student	-.38	.22	-1.78	.226
	Field to Faculty	.45	.22	2.10	.106
	Faculty to Student	.70	.22	.32	1.000
2.1.10c	Field to Student	-.39	.22	-1.80	.215
	Field to Faculty	.71	.22	3.27	.003*
	Faculty to Student	.32	.22	1.47	.422
2.1.10d	Field to Student	-.40	.22	-1.79	.221
	Field to Faculty	-.03	.22	-.11	1.000
	Faculty to Student	-.43	.22	-1.90	.172

*$p < .05$

A total of 13 statistical tests were performed in order to answer research question two. As mentioned previously, there is an increased risk for statistical errors and false positives when multiple tests are performed using the same dataset (Benjamini & Hochberg, 2000). As a last step, this researcher conducted the False Discovery Rate procedure; however, because Bonferroni's correction was more conservative and less prone to false positives than the False Discovery Rate, this researcher simply reported the False Discovery Rates in Appendix F.

Conclusions

The goal of this study was to examine three years of historical data from a Midwestern bachelor-level social work program to determine if faculty, students, and field instructors were consistent in how they rated students' 13 social work core competencies. Two research questions were developed in order to meet the goal of this study.

Research Question One

What are the differences or similarities in how: faculty assess Bachelor of Social Work student competence across three years, field instructors assess student competence across three years, and students self-assess competence across three years?

The first research question revealed that faculty, field instructors, and students all assessed BSW students' core competency high. In fact, a ceiling effect was created when faculty, field instructors, and students assigned multiple students high assessment scores. Previous research supports this study's finding where assessors assigned students high scores related to competence (Bogo et al., 2006; Choi & Bakken, 2013; Cole, 2009; Dunagan et al., 2014; Geisinger, 1980; Sussman et al., 2014; Vinton & Wilke, 2011).

Geisinger (1980) found that faculty's attitude toward grading could impact the scores assigned to students. For example, faculty who felt positively about grading assignments often gave students' higher scores. This dynamic could explain the ceiling effect found in the faculty assessment conducted in this study, particularly with the faculty rater in 2012 who frequently scored students' competence higher than the faculty raters in 2013 and 2014.

Vinton and Wilke's (2011) findings suggested that field instructors' evaluation of students was higher when the assessment occurred face-to-face versus anonymously. For this Midwestern social work program, field instructors were required to review their assessment scores with the BSW student. This face-to-face evaluation might explain the ceiling effect that was seen in this study. Furthermore, Sussman et al. (2014) and Bogo et al. (2006) found that when students displayed initiative, energy, and maturity, field instructors were more likely to rate their performance as high. This phenomenon could explain the ceiling effect that was seen related to field instructors' high assessment scores in this study.

This study also supported previous findings that suggested students overestimated their own competence. In fact, Cole (2009) found that students rated their own compliance with established standards consistently high during self-assessment. Dunagan et al. (2014) and Choi and Bakken (2013) also concluded that students inflated their own competence due to inherent pressure to present as good and unintentional pressure to provide desired responses on self-assessment forms.

Next, the findings from research question one revealed that faculty demonstrated the most statistically significance differences in how they rated student competence across three years. In fact, there were only three faculty assessors (one each academic year) yet there were statistically significant differences in how these three faculty assessed 12 of the 13 core competencies. There were 45 students who assessed their own competence, yet there were only statistically significant differences in how students rated two core competencies. Finally, there were 75 field instructors who assessed students' competence across three academic years, yet there were no statistically significant

differences in their assessment of BSW student competence. The findings in this study would support Bennett's et al. (2012) findings that indicated that field instructors' assessment was a reliable method of evaluating social work student competence. Furthermore, this current study supported Bahous and Nabhani's (2011) and Bogo (2004) findings that revealed even though field experience was different for each student, experienced field instructors were able to consistently assess student competence and readiness for practice. Lastly, this current study supported Gorton and Hayes' (2014) findings that preceptors who evaluated students' performance in a clinical setting provided more consistent assessment of student competence than students' assessment of their own competence.

Research Question Two

What is the consistency across the raters when comparing how faculty, field instructors, and students assess the same Bachelor of Social Work students' competence across three years?

The second research question revealed that students assessed their own social work competence higher than field instructors rated the same students on four of the 13 core competencies. Similarly, students rated their own competence higher than faculty assessors on two of the 13 core competencies. These results support Austin and Gregory's (2007) findings that revealed students' self-assessment was inflated compared to other assessors.

Second, this research question demonstrated that faculty and students' assessment of BSW students' core competence were more closely aligned than students and field instructors' assessment of the same BSW students. Lawson et al. (2012) found that

student and faculty assessment scores become more consistent throughout a student's education. In fact, student and faculty alignment in assessment scores could be due to the repeated exposure to educational standards and feedback from faculty to students related to expectations.

Conversely, the current findings do not support Vinton and Wilke's (2011), Mathiesen and Hohman's (2013), or Sherer and Peleg-Oren's (2005) findings that reported an alignment between how field instructors and students rated students' competence. However, this study did align with Jensen (2013), Doe et al. (2013), and Wagner et al. (2011) findings that faculty and students' self-assessment scores were significantly similar. In this study, faculty and students' assessment were consistent when rating 11 of the 13 core competencies across three academic years.

Implications and Recommendations

A number of implications and recommendations can be made from the current research. First, this study revealed a gap in the literature. In fact, there was only one other study identified in the literature review that compared how faculty, field instructors, and students assessed the same BSW students' competence (Sherer & Peleg-Oren, 2005). According to the CSWE, all social work programs are required to collect and submit data related to field instructors' assessment of students' competence and at least one other form of assessment (which is most often faculty or students' self-assessment) (Council on Social Work Education, 2008). Analyzing and reporting on assessment trends could allow social work programs to contribute to the literature and assess their own academic

program effectiveness. In fact, Achcaoucaou et al. (2014) found that measuring student competence and using students' self-assessment allowed universities to better understand the strengths and weakness of their academic programs.

Second, this study confirmed the CSWE's determination that field experience should be the signature pedagogy for social work education (Council on Social Work Education, 2008). This study confirmed that field instructor assessment of BSW student competence was the most consistent across three academic years. The current study validated the CSWE's requirement that social work educational programs must submit evidence that experienced professional social workers assessed the students' core competencies in a clinical setting prior to graduating from the social work program.

Third, due to the inflation of assessment scores among faculty, field instructors, and students, the current study supported the findings of previous researchers who suggested that multiple methods of assessment should be used and compared when evaluating students' competence (Senger & Kanthan, 2012). For example, in the current study the faculty assessor in 2012 rated students' competency 2.1.7 higher than the faculty assessor in 2013; however the students in 2012 rated competency 2.1.7 higher than the students in 2014, not the students in 2013. This comparison indicated that the faculty assessor in 2012 viewed students' competency 2.1.7 higher than they viewed their own competence.

Lastly, this study confirmed Rawlings' (2012) findings that social work educational programs needed to develop reliable and valid instruments for assessing student competence. Currently, social work programs are permitted to develop their own tools in order to assess student competence (Council on Social Work Education, 2008).

However, it may be beneficial for social work educational programs to develop normed assessment tools for determining student competence at various points in the social work program. Jeffreys and Dogan (2013) suggested programs should assess student competence between and within educational courses to gain an accurate assessment of student growth and knowledge. Alquraan et al. (2010) and Lakanmaa et al. (2014) suggested faculty should use a variety of assessment methods to determine student competence.

The following recommendations are offered to future researchers who are interested in exploring a similar study. First, the current study was conducted with only one Midwestern social work program; therefore, the findings cannot be generalized to all social work programs. Future researchers should consider assessing multiple social work programs so that the sample size is larger and the findings can be generalized to the larger population.

Second, providing a method for students to monitor or witness their own performance might impact students' self-assessment scores. For example, Ward et al. (2003) found that students' self-assessment improved after students watched a video of their own performance in a clinical setting. Hwang et al. (2015) found that journaling positively impacted students' self-assessment. Perhaps social work programs should incorporate self-reflective tools (like videotaping and/or journaling) to improve the accuracy of students' self-assessment of social work competence.

Third, it is important for universities to establish consistent assessment tools (across all types of raters) and effective methods for collecting assessment data from all participants. In this study, it initially appeared that faculty, field instructors, and students

were all assessing the same 13 core competencies and the same 41 practice behaviors. However, upon closer review, it was discovered that only the field instructors were responding to all of the criteria. Faculty and students were responding to all of the 13 core competencies, but not all of the 41 practice behaviors. It is uncertain if this discrepancy in the evaluation forms affected the findings. In addition, 100% (n = 83) of the faculty and field instructors' responses were collected while only 53.7% (n = 45) of the students' responses were available. Future studies should ensure consistency in the assessment forms and ensure a reliable system for collecting all participants' data. In fact, future researchers could examine how consistent faculty, field instructors, and students rate individual student's competence, if all assessment forms were available for the three groups of raters.

Fourth, social work programs might want to reconsider only having one faculty assess student competence in the final semester of the students' BSW program. More assessors would naturally move scoring toward a standard mean (Leedy & Ormond, 2010). In fact, the higher the number of raters, the more consistent the outcomes would appear since there is a natural tendency toward a central mean. The findings in this study could be a result of the number of evaluators. For example, faculty assessment was the most statistically significantly different in rating 12 of 13 core competencies; however, there were only three total raters (one for each academic year). Students' self-assessment demonstrated the next most statistically significant differences when rating 2 of the 13 core competencies with a total of 45 different student assessors. Finally, 75 different field instructors demonstrated no difference in how they rated student competence. One should consider if these findings were impacted by the number of assessors.

Fifth, social work programs should identify how they define competence. For example, unless there is specific guidance, faculty could measure current students' against all of the previous students they have taught, field instructors could measure competence according to the professionals they work with in a clinical setting, and students could be measuring their own performance as compared to the peers in their graduating class. Interestingly, Geisinger (1980) found that faculty who compared students' competence to a larger sample group tended to rate student performance higher. Furthermore, Nasrallah (2014) described the importance of universities training new faculty on expectations related to university and accrediting standards to ensure consistency in faculty assessment. It seems important for social work programs to identify their larger sample group for comparison, so that there is consistency when assessing student competence.

Finally, a limitation of this study was the inherent risk of making a Type I, Type II, or familywise error. A total of 52 independent tests were performed using the same independent and dependent variables. Benjamini and Hochberg (2000) warned that conducting multiple studies using the same data could yield false statistical significance. Although this researcher utilized the Bonferroni correction and False Discovery Rate to minimize the possibility of statistical errors, future researchers might want to consider isolating a few of the 13 CSWE's core competencies in order to more closely examine similarities and differences in how students, faculty, and field instructors rate a few of the core competencies.

In summary, this study contributed to the scholarly literature. The current study fills a gap in assessing the various methods of evaluating social work students' competence. The study demonstrated that faculty, field instructors, and students all tended to assess BSW student competence high. The study also revealed that faculty assessors were more often statistically significantly different in their evaluation of students' competence across three academic years. The current study also found that students rated themselves as having higher competence than field instructors and/or faculty rated the same students on five of the 13 core competencies. This study provided an example of how other researchers could analyze social work student competence as well as implications and recommendations that might improve future research efforts.

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Appendix A

CSWE 13 Core Competencies and 41 Practice Behaviors

2.1.1 Core Competency: Professional Identity
Practice Behaviors (1-6); Social Workers:

- (1) advocate for client access to the services of social work;
- (2) practice personal reflection and self-correction to assure continual professional development;
- (3) attend to professional roles and boundaries;
- (4) demonstrate professional demeanor in behavior, appearance, and communication;
- (5) engage in career-long learning; and
- (6) use supervision and consultation

2.1.2 Core Competency: Ethical Practice
Practice Behaviors (7-10); Social Workers:

- (7) recognize and manage personal values in a way that allows professional values to guide practice;
- (8) make ethical decisions by applying standards of the National Association of Social Workers Code of Ethics and, as applicable, of the International Federation of Social Workers/International Association of Schools of Social Work Ethics in Social Work, Statement of Principles;
- (9) tolerate ambiguity in resolving ethical conflicts; and
- (10) apply strategies of ethical reasoning to arrive at principled decisions.

2.1.3 Core Competency: Critical Thinking
Practice Behaviors (11-13); Social Workers:

- (11) distinguish, appraise, and integrate multiple sources of knowledge, including research-based knowledge, and practice wisdom;
- (12) analyze models of assessment, prevention, intervention, and evaluation; and
- (13) demonstrate effective oral and written communication in working with individuals, families, groups, organizations, communities, and colleagues.

2.1.4 Core Competency: Diversity in Practice
Practice Behaviors (14-17); Social Workers:

- (14) recognize the extent to which a culture's structures and values may oppress, marginalize, alienate, or create or enhance privilege and power;
- (15) gain sufficient self-awareness to eliminate the influence of personal biases and values in working with diverse groups;
- (16) recognize and communicate their understanding of the importance of difference in shaping life experiences; and
- (17) view themselves as learners and engage those with whom they work as informants.

2.1.5 Core Competency: Human Rights and Social Justice
Practice Behaviors (18-20); Social Workers:

- (18) understand the forms and mechanisms of oppression and discrimination;
- (19) advocate for human rights and social and economic justice; and
- (20) engage in practices that advance social and economic justice.

2.1.6 Core Competency: Research Based Practice
Practice Behaviors (21-22); Social Workers:

- (21) use practice experience to inform scientific inquiry and
- (22) use research evidence to inform practice.

2.1.7 Core Competency: Human Behavior
Practice Behaviors (23-24); Social Workers:

- (23) utilize conceptual frameworks to guide the processes of assessment, intervention, and evaluation; and
- (24) critique and apply knowledge to understand person and environment.

2.1.8 Core Competency: Policy Practice
Practice Behaviors (25-26); Social Workers:

- (25) analyze, formulate, and advocate for policies that advance social well-being; and
- (26) collaborate with colleagues and clients for effective policy action.

2.1.9 Core Competency: Practice Contexts
Practice Behaviors (27-28); Social Workers:

- (27) continuously discover, appraise, and attend to changing locales, populations, scientific and technological developments, and emerging societal trends to provide relevant services; and
- (28) provide leadership in promoting sustainable changes in service delivery and practice to improve the quality of social services.

2.1.10 Core Competency: Engage, Assess, Intervene, Evaluate
2.1.10a Engagement-Practice Behaviors (29-31); Social Workers:

- (29) substantively and effectively prepare for action with individuals, families, groups, organizations, and communities;
- (30) use empathy and other interpersonal skills; and
- (31) develop a mutually agreed-on focus of work and desired outcomes.

2.1.10b Assessment-Practice Behaviors (32-35); Social Workers:

- (32) collect, organize, and interpret client data;
- (33) assess client strengths and limitations;
- (34) develop mutually agreed-on intervention goals and objectives; and
- (35) select appropriate intervention strategies.

2.1.10c Intervention-Practice Behaviors (36-40); Social Workers:

- (36) initiate actions to achieve organizational goals;
- (37) implement prevention interventions and enhance client capacities;
- (38) help clients resolve problems;
- (39) negotiate, mediate, and advocate for clients; and
- (40) facilitate transitions and endings

2.1.10d Evaluation-Practice Behavior (41); Social Workers:

- (41) critically analyze, monitor, and evaluate interventions (Council on Social Work Education, 2008).

Appendix B

Five Faculty Assessment Rubrics

SOWK 405 – Stress & Boundary Issues Paper

Levels/Criteria	Excellent (90-100%)	Meets Expectations (80-89%)	Needs Improvement (70-79%)	Unacceptable (0-69%)	Score/Level
Identification as a Professional Social Worker (2.1.1): -Does the student identify a specific area of needed attention in dealing with professional boundaries? (#3) -Does the student effectively use supervision to gain insight into strategies for managing professional boundaries? (#6)	Student identifies and clearly describes an area of professional boundaries that will require ongoing attention. Student provides concrete examples. Student uses supervision with the field instructor to learn ways to manage specific stressors.	Student identifies and generally describes an area of professional boundaries that will require ongoing attention. Student uses supervision with the field instructor to learn ways to manage specific stressors.	Student generally discusses boundaries without identifying a personal area of concern. Student does not clearly articulate lessons/management strategies gathered from supervision with the field instructor.	Student fails to identify an area of ongoing professional boundaries and does not reflect lessons learned through supervision with the field instructor.	

SOWK 405 – Professional Ethics Paper

Levels/Criteria	Excellent (90-100%)	Meets Expectations (80-89%)	Needs Improvement (70-79%)	Unacceptable (0-69%)	Score/Level
Application of Social Work Ethical Principles (2.1.2): -Does the student correctly apply the standards of the NASW Code of Ethics to his/her field placement? (#8)	Student clearly describes the policies of his/her field placement agency and makes strong connections to the standards of the NASW Code of Ethics.	Student generally describes the policies of his/her field placement agency and makes connections to the standards of the NASW Code of Ethics.	Student describes the policies of his/her field placement agency but struggles to make connections to the standards of the NASW Code of Ethics.	Student fails to describe the policies of his/her field placement agency and does not make connections to the standards of the NASW Code of Ethics.	

SOWK 405 – Case Presentation (page 1 of 3)

Levels/Criteria	Excellent (90-100%)	Meets Expectations (80-89%)	Needs Improvement (70-79%)	Unacceptable (0-69%)	Score/Level
Application of Critical Thinking (2.1.3): -Does the case history identify an appropriate assessment tool? (#12)	Case history identifies and appropriately uses an assessment tool. The student understands the benefits and limitations of the assessment tool.	Case history identifies and appropriately uses an assessment tool. The student generally understands the benefits and limitations of the assessment tool.	Case history identifies and appropriately uses an assessment tool. No analysis of the assessment tool is given.	Case history does not utilize an assessment tool or administers the assessment tool inappropriately. No analysis of the assessment tool is given.	
Application of HBSE Knowledge (2.1.7): -Does the case history incorporate knowledge about the client's human behavior and development? (#23) -Is the knowledge taken into account in the client's assessment and intervention? (#24)	It is clear from the case history that the student understands the client and his/her developmental life stage. The student takes this knowledge and modifies his/her assessment and intervention accordingly.	It is clear from the case history that the student generally understands the client and his/her developmental life stage. It is less clear how this information impacted the assessment and intervention with the client.	The case history speaks broadly to the client's developmental life stage but no intentional connection was made to the assessment and intervention.	The case history makes no reference to the client's developmental life stage.	

Effective Engagement (2.1.10a): -Does the case history show evidence that the student prepared in advance for work with the identified client? (#29) -Does the case history show evidence that the student used interpersonal skills to develop common objectives with the identified client? (#30, #31)	It is clear from the case history that the student prepared in advance of meeting the client. The student gives specific examples of developing rapport with the client and collaborating to develop desired outcomes of work together.	The case history shows evidence of efforts to prepare for meeting the client; however, documentation is less clear. The student alludes to developing rapport with the client, but does not state specifics of how this was accomplished. Student effectively collaborates with client to develop desired outcomes of work together.	It can be inferred from the case history that the student prepared in advance of meeting the client, but no direct reference is given. The case history broadly discusses engagement but offers no examples of collaborating with the client to develop desired outcomes of work together.	No evidence is present that the student prepared in advance to meet the client. It cannot be inferred from the case history that the social worked used interpersonal skills to develop an agreed-upon plan of work together.	
Effective Assessment (2.1.10b): -Is the assessment in the case history organized, comprehensive, and include client strengths? (#32, #33) -Does the assessment serve as a guide for appropriate goals, objectives, and interventions? (#34, #35)	The case history is well-organized, includes comprehensive information relevant to the case, and identifies client strengths. The student clearly uses the assessment information 1.) to create goals/objectives for working with the client and 2.) guide the choice of intervention.	The case history is well-organized, but less comprehensive or strengths-based. It is clear that the student used assessment information to guide decisions of setting goals and choosing interventions.	The case history is loosely organized, contains missing areas of assessment, and does not directly address client strengths. The assessment information broadly impacts the development of goals and interventions, with no direct documentation that the student collaborated with the client.	The case history is disorganized, contains multiple gaps in assessment and does not address the strengths of the client. There is no evidence that the assessment information guided the student in setting goals or choosing interventions with the client.	

Effective Intervention (2.1.10c): -Does the case history give evidence that the intervention improved the client's capacity? (#37) -Did the intervention help the client solve problems or advocate on behalf of the client? (#38, #39)	The case history clearly identifies the intervention with the client and offers specific examples of how the intervention helps the client meet his/her goals.	The case history clearly identifies the intervention with the client. Examples of how the intervention helps the client meet his/her goals is less clear.	The case history broadly discusses the intervention, but no direct evidence is present that the intervention helped the client meet his/her goals.	The case history fails to identify an intervention or an intervention is carried out incorrectly or unethically.	
ADDENDUM-Engagement in Diversity (2.1.4): -Does the addendum speak to the client's diversity from the student? (#16) -Does the student identify lessons learned from the client? (#17)	The addendum clearly identifies issues of diversity between the student and the client. The student provides specific examples of how diversity impacted the work with the client. The student shows insight and honesty in lessons gained from working with the client	The addendum clearly identifies issues of diversity between the student and the client. The student speaks generally to the ways in which diversity impacted work with the client. Lessons learned from working with the client are less clear.	The addendum broadly identifies issues of diversity between the student and the client. The student struggles to identify how issues of diversity impacted practice or lessons learned from working with a diverse client.	The addendum fails to address issues of diversity or how diversity impacted work with the client. No mention is made of lessons learned.	

SOWK 405 – Agency Analysis (page 1 of 2)

Levels/Criteria	Excellent (90-100%)	Meets Expectations (80-89%)	Needs Improvement (70-79%)	Unacceptable (0-69%)	Score/Level
Advancement of Social/Economic Justice (2.1.5): -Does the paper clearly identify an area of macrodiscrimination (or lack thereof)? (#18) -Does the paper clearly identify ways the agency is addressing social injustice? (#20)	It is clear from the paper, that the student understands macrodiscrimination and the role of the agency. Paper provides clear and specific examples of macrodiscrimination and highlights areas of possible improvement. If no evidence of macrodiscrimination is observed, the paper identifies examples of the agency's efforts to counter discrimination and oppression.	It is clear from the paper, that the student understands macrodiscrimination and the role of the agency. Paper provides general information regarding agency efforts to counter discrimination and oppression, but does not provide concrete observations. If no evidence of macrodiscrimination is present, the paper generally discusses efforts of the agency to counter discrimination and oppression.	It is not clear from the paper that the student understands macrodiscrimination or the role of the agency. Discrimination and oprression are generally discussed without reference to specific observations or suggestions for improvement.	Paper fails to discuss discrimination or oppression in a coherent way. The student does not appear to understand the role of the agency in addressing issues of discrimination or oppression.	
Engagement in Policy to Advance Social Well-Being (2.1.8): -Does the paper identify an action group that the agency collaborates with for effective policy or political action? (#26)	Paper clearly describes the agency's involvement in macro-level policy and political action groups or relationship with colleagues in the field that has resulted in positive change for the client group or agency.	Paper identifies the agency's involvement with a macro-level policy or political action group but offers little description of the agency's role in promoting positive change for the client group.	Paper generally discusses the agency's involvement in macro-level policy but makes no specific reference to a policy/political action group or colleagues in the field in which the agency has collaboration.	Paper fails to identify the agency's connection to a larger policy or political action group.	

Response to Context that Shape Practice (2.1.9): -Does the paper make credible suggestions for improving quality in the services or service delivery in the agency? (#28)	Paper offers multiple, well though-out suggestions to address the issues identified in the paper. The suggestions are realistic and demonstrate an understanding of the context of the agency.	Paper offers one or two general suggestions to address the issues identified in the paper. The suggestions are realistic and demonstrate an understanding of the context of the agency.	Paper offers one general suggestion. The suggestion doesn't specifically address an issue identified in the paper or is unsustainable.	Paper fails to make a suggestion for improving the quality of services or the delivery of services to the agency. The suggestion is inappropriate, unethical, or unsustainable.	

SOWK 405 – Semester Project

Levels/Criteria	Excellent (90-100%)	Meets Expectations (80-89%)	Needs Improvement (70-79%)	Unacceptable (0-69%)	Score/Level
Engagement in Research-Informed Practice (2.1.6): -Does the project provide information that will inform future practice at the field placement agency? (#22)	Project is specifically designed to provide information that will guide the future practice of the field placement agency. Gathered information is clear and informative. Project is presented in such a way to direct further action by the agency.	Project is generally designed to provide helpful to the field placement agency. The information gathered is informative, but does not relate to specific actions to be taken by the field placement agency.	Project is disorganized, unclear, or does not provide information that would guide action by the field placement agency.	Project is incomplete or fails to provide information that will benefit future clients at the field placement agency.	
Effective Evaluation (2.1.10d): -Does the project effectively analyze, monitor, and evaluate interventions? (#41)	Project clearly describes the effectiveness of the student's intervention. Information is gathered correctly and shared honestly to inform future interventions.	Project addresses the effectiveness of the student's intervention. Outcome data is less clear. Information is gathered correctly and shared honestly to inform future interventions.	Project is disorganized, unclear, or does not provide interpretation of the data in such a way to inform future interventions with clients.	Project fails to offer information that will help the field placement agency know if interventions have been successful. Gathered data/information is not honestly shared.	

Appendix C

Field Placement Evaluation Form

Department of Social Work
Field Placement Evaluation

Student Name: _____

Field Supervision Agency: _____

Field Supervisor Name: _____

Total Hours Completed (circle one): 225 Hours or 450 Hours **Date of Completion:** _____

Please evaluate the student's level of achievement by checking the box that best represents the student's performance at this time. Use the following standards to guide your evaluation:

"Exceeds expectations" indicates that the student demonstrates this behavior 90-100% of the time
"Meets expectations" indicates that the student demonstrates this behavior 80-89% of the time.
"Needs improvement" indicates that the student demonstrates this behavior 70-79% of the time.
"Unacceptable" indicates that the student fails to demonstrate this practice behavior.

1. Identification as a Professional Social Worker

The ONU student must serve as a representative of the profession, its mission, and its core values. He/she must know the profession's history and commit himself/herself to the profession's enhancement and to his/her own professional conduct and growth.

How would you rate the student on the following criteria?

	Exceeds Expectations	Meets Expectation	Needs Improvement	Unacceptable
The student understands how to advocate and connect clients to the services of social work.				
The student engages in personal reflection that improves his/her abilities.				
The student practices professional boundaries.				
The student acts, speaks, and writes in a professional way.				
The student makes efforts to learn the best practices of your area of social work.				
The student understands his/her responsibility to seek and use supervision.				

Provide an example of the student's aptitude or failure to demonstrate these criteria:

2. Application of Social Work Ethical Principles
The ONU student has an obligation to conduct himself/herself ethically and to engage in ethical decision making. A student must be knowledgeable about the value base of the profession, its ethical standards, and relevant law.

How would you rate the student on the following criteria?

	Exceeds Expectations (90-100%)	Meets Expectation (80-89%)	Needs Improvement (70-79%)	Unacceptable (0-69%)
7. The student recognizes and manages his/her personal values in a way that allows professional standards to guide practice.				
8. The student knows the NASW Code of Ethics and uses its principles to make practice decisions.				
9. The student is open to accepting that multiple ethical principles may apply to a client's situation.				
10. The student uses critical thinking to make ethical decisions.				

Provide an example of the student's aptitude or failure to demonstrate these criteria:

3. Application of Critical Thinking to Inform Judgment
The ONU student must be knowledgeable about the principles of logic, scientific inquiry, and reasoned discernment. They must use critical thinking augmented by creativity and curiosity to synthesize and communicate relevant information.

How would you rate the student on the following criteria?

	Exceeds Expectations (90-100%)	Meets Expectation (80-89%)	Needs Improvement (70-79%)	Unacceptable (0-69%)
11. The student uses multiple sources of information (including research-based knowledge) to inform practice decisions.				
12. The student can analyze different options to choose the best course of action.				
13. The student is able to write and speak in a way that clearly demonstrates how a choice was made.				

Provide an example of the student's aptitude or failure to demonstrate these criteria:

4. Engagement in Diversity and Difference in Practice.
The ONU student must understand diversity as the intersectionality of multiple factors including: age, class, color, culture, disability, ethnicity, gender, gender identity and expression, immigration status, political ideology, race, religion, sex, and sexual orientation. The ONU student must appreciate that, as a consequence of difference, a person's life experiences may include oppression, poverty, marginalization, and alienation as well as privilege, power, and acclaim.

How would you rate the student on the following criteria?

	Exceeds Expectations (90-100%)	Meets Expectation (80-89%)	Needs Improvement (70-79%)	Unacceptable (0-69%)
14. The student recognizes that, in society, power and privilege can oppress groups in direct and indirect ways.				
15. The student knows his/her obligation to be aware of and remove personal biases from practice.				
16. The student is can articulate how differences in clients, and client systems, can add value to his/her practice.				
17. The student seeks to learn from the uniqueness of every client.				

Provide an example of the student's aptitude or failure to demonstrate these criteria:

5. Advancement of Human Rights and Social/Economic Justice.
The ONU student must acknowledge that each person, regardless of position in society, has basic human rights, such as freedom, safety, privacy, an adequate standard of living, health care, and education. The ONU student must recognize the global interconnections of oppression and be knowledgeable about theories of justice and strategies to promote human and civil rights.

How would you rate the student on the following criteria?

	Exceeds Expectations (90-100%)	Meets Expectation (80-89%)	Needs Improvement (70-79%)	Unacceptable (0-69%)
18. The student can identify ways that clients face oppression and discrimination.				
19. The student understands his/her responsibility to stand up to injustice (economic or social).				
20. The student seeks ways to create justice and equality.				

Provide an example of the student's aptitude or failure to demonstrate these criteria:

6. Engagement in Research-informed Practice
The ONU student must use practice experience to inform research, employ evidence-based interventions, evaluate their own practice, and use research findings to improve practice, policy, and social service delivery. The ONU student must comprehend quantitative and qualitative research and understand scientific and ethical approaches to building knowledge.

How would you rate the student on the following criteria?

	Exceeds Expectations (90-100%)	Meets Expectation (80-89%)	Needs Improvement (70-79%)	Unacceptable (0-69%)
21. The student allows practice to identify areas that require further research and understanding.				
22. The student uses evidenced-based, best practices when working with clients.				

Provide an example of the student's aptitude or failure to demonstrate these criteria:

7. Application of Knowledge about Human Behavior in the Social Environment
The ONU student is knowledgeable about human behavior across the life course; the range of social systems in which people live; and the ways social systems promote or deter people in maintaining or achieving health and well-being. The ONU student applies theories and knowledge from the liberal arts to understand biological, social, cultural, psychological, and spiritual development.

How would you rate the student on the following criteria?

	Exceeds Expectations (90-100%)	Meets Expectation (80-89%)	Needs Improvement (70-79%)	Unacceptable (0-69%)
23. The student allows conceptual frameworks of human development to guide work with clients.				
24. The student strives to understand each client in the context of his/her environment.				

Provide an example of the student's aptitude or failure to demonstrate these criteria:

8. Engagement in Policy to Advance Social Well-being
The ONU student must understand that policy affects service delivery, and he/she must actively engage in policy practice. The ONU student must know the history and current structures of social policies and services; the role of policy in service delivery; and the role of practice in policy development.

How would you rate the student on the following criteria?

	Exceeds Expectations (90-100%)	Meets Expectation (80-89%)	Needs Improvement (70-79%)	Unacceptable (0-69%)
25. The student understands how policies impact clients.				
26. The student advocates for policies that will improve client functioning.				
27. The student values collaborating with clients to pursue mutually beneficial policies.				

Provide an example of the student's aptitude or failure to demonstrate these criteria:

9. Response to Contexts that Shape Practice
The ONU student must be informed, resourceful, and proactive in responding to evolving organizational, community, and societal contexts at all levels of practice. The ONU student must recognize that the context of practice is dynamic, and use knowledge and skill to respond proactively.

How would you rate the student on the following criteria?

	Exceeds Expectations (90-100%)	Meets Expectation (80-89%)	Needs Improvement (70-79%)	Unacceptable (0-69%)
28. The student adapts his/her practice to make it relevant to the client.				
29. The student makes efforts to improve how services are delivered to clients.				

Provide an example of the student's aptitude or failure to demonstrate these criteria:

10. Skills/Abilities in Working with Clients

Professional practice involves the dynamic and interactive processes of engagement, assessment, intervention, and evaluation at multiple levels. An ONU student must have the knowledge and skills to practice with individuals, families, group, organizations and communities. This practice knowledge includes: identifying, analyzing, and implementing evidence-based interventions designed to achieve client goals; using research and technological advances; evaluating program outcomes and practice effectiveness; developing, analyzing, advocating, and providing leadership for policies and services; and promoting social/economic justice.

How would you rate the student on the following criteria?

	Exceeds Expectations (90-100%)	Meets Expectation (80-89%)	Needs Improvement (70-79%)	Unacceptable (0-69%)
30. The student prepares for each interaction with a client/group.				
31. The student develops empathic relationships with clients.				
32. The student collaborates with each client to develop goals and outcomes.				
33. The student gathers accurate assessment data to inform his/her work with clients.				
34. The student assesses each client for strengths as well as limitations.				
35. The student uses assessment to develop goals for intervention.				
36. The student chooses appropriate interventions.				
37. The student works with clients in ways that align with the goals of the agency.				
38. The student carries out interventions that build on the strengths of each client.				
39. The student is helpful in resolving the problems of his/her clients.				
40. The student is able to negotiate, mediate, and advocate for his/her clients.				
41. The student effectively terminated or transferred clients before ending an intervention.				
42. The student monitored and evaluated his/her intervention to determine if he/she was effective in working with the client.				

Provide an example of the student's aptitude or failure to demonstrate these criteria:

11. General Items of Interest

How would you describe your experience in working with this student?
How can ONU better facilitate a field placement experience with your agency?
Additional comments, concerns, or suggestions:

Supervisor Signature: _____ **Date:** _____

Student Signature: _____ **Date:** _____

Student acknowledges that he/she has reviewed the Field Placement Evaluation. Signing this form does not indicate agreement with the content of the evaluation. Student retains the right to respond to this evaluation by submitting a written formal rebuttal.

Field Supervisor Signature: _____ **Date:** _____

Appendix D

Student Self-Assessment

Posttest Form

Field Seminar II Post-test

Please answer the following questions regarding the course SOWK 405: Field Seminar II. Your answers will help assess the course and its outcomes.

Name	
ID Number	

How would you rate your confidence in your ability to perform the following behaviors:	Confident	Somewhat Confident	Somewhat Unconfident	Unconfident
I understand and practice professional roles and boundaries.				
I understand my responsibility to seek ongoing professional supervision and consultation.				
I am knowledgeable of the NASW Code of Ethics and use it to make practice decisions.				
I can analyze models of the planned change process and determine the best course of action for my client.				
I understand and can articulate how differences in clients and systems add value to my social work practice.				
I realize that I will be required to learn from the uniqueness of each client in my practice.				
I can identify the many ways in which client populations are oppressed and discriminated against.				
I know my responsibility to be aware of and stand up to injustice, both economic and social.				
I understand my responsibility to research and use evidence-based best practices when working with clients.				
I have learned the conceptual frameworks of human development and will let them guide my work with clients.				
I understand how policies impact clients and will advocate for those policies that improve client functioning.				
I know the value of collaborating with clients and other professionals to pursue mutually beneficial policies.				
I will lead the effort to improve social work services and how they are delivered to clients.				
I understand the importance of preparing for each interaction with a client or client group.				

How would you rate your confidence in your ability to perform the following behaviors:	Confident	Somewhat Confident	Somewhat Unconfident	Unconfident
I know how to engage in an empathic relationship with a client.				
I can engage clients in a collaborative effort to lead toward the development of goals and outcomes.				
I know how to gather accurate assessment data and use it to inform practice with clients.				
I will use each assessment opportunity to search for client strengths, as well as limitations.				
I can work with a client or client group during the assessment phase to develop goals for intervention.				
I know how to choose the most appropriate intervention.				
I can carry out interventions that build on clients' strengths.				
I know how to help clients resolve their problems.				
I am familiar with the methods of negotiating, mediating, and advocating for clients.				
I am familiar with how to analyze, monitor, and evaluate interventions to determine their effectiveness.				

	Agree	Somewhat Agree	Somewhat Disagree	Disagree
I felt adequately supported by the Social Work Program during my field placement experience.				
I felt adequately prepared for what I was expected to do at my field placement experience.				
My experience with field placement has enhanced my desire to practice social work in the future.				
I have firm plans to participate in the profession of social work (employment/grad. School) after graduation.				
Suggestions for Course Improvement:				

Appendix E

Research Question 1:

False Discovery Rate

Appendix E: False Discovery Rate for Research Question One

p	i	m	S	ABH
.990	39	39	.0100	.0500
.871	38	39	.0645	.0487
.840	37	39	.0533	.0474
.771	36	39	.0573	.0462
.757	35	39	.0486	.0449
.747	34	39	.0422	.0436
.701	33	39	.0427	.0423
.664	32	39	.0420	.0410
.601	31	39	.0443	.0397
.545	30	39	.0455	.0385
.494	29	39	.0460	.0372
.383	28	39	.0514	.0359
.375	27	39	.0481	.0346
.346	26	39	.0467	.0333
.256	25	39	.0496	.0321
.254	24	39	.0496	.0308
.192	23	39	.0475	.0295
.167	22	39	.0463	.0282
.134	21	39	.0456	.0269
.127	20	39	.0437	.0256
.123	19	39	.0418	.0244
.122	18	39	.0399	.0231
.110	17	39	.0387	.0218
.109	16	39	.0371	.0205
.057	15	39	.0377	.0192
.014	14	39	.0379	.0179
.009	13	39	.0367	.0167*
.006	12	39	.0355	.0154*
.005	11	39	.0343	.0141*
.001	10	39	.0333	.0128*
.001	9	39	.0322	.0115*
.001	8	39	.0312	.0103*
.001	7	39	.0303	.0090*
.001	6	39	.0294	.0077*
.001	5	39	.0285	.0064*
.001	4	39	.0278	.0051*
.001	3	39	.0270	.0038*
.001	2	39	.0263	.0026*
.001	1	39	.0256	.0013*

Appendix F

Research Question 2:

False Discovery Rate

Appendix F: False Discover Rate for Research Question Two

p	i	m	S	ABH
.817	13	13	.1830	.0500
.171	12	13	.4145	.0461
.077	11	13	.3077	.0423
.042	10	13	.2395	.0385
.033	9	13	.1934	.0346*
.015	8	13	.1642	.0308*
.013	7	13	.1410	.0269*
.009	6	13	.1239	.0231*
.003	5	13	.1108	.0192*
.001	4	13	.0999	.0153*
.001	3	13	.0908	.0115*
.001	2	13	.0833	.0077*
.001	1	13	.0768	.0038*