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An Innovative Methodology for Assessing Student Learning Outcome Achievement

Eric M. Rosen, Kyle Weir, & Susan Tracz, *California State University, Fresno*

Abstract: University-associated training facilities for Marriage and Family Therapy/Marriage, Family, and Child Counseling (MFT/MFCC) programs serve several purposes; however, of paramount importance is meeting the academic needs of counselor trainees. Student learning outcomes for counselor trainees aim to address social justice issues, such as primary language and financial impoverishment of clients. This article presents a pilot study that examined an innovative methodology for assessing student learning outcomes at an MFT/MFCC program's training clinic.

Keywords: university-associated training facilities, counselor trainees, social justice

Introduction

The purpose of this article is to present a student learning outcomes (SLOs) assessment methodology that may be helpful to faculty in Marriage and Family Therapy/Marriage, Family, and Child Counseling (MFT/MFCC) programs having university-associated counselor training facilities. The context of this case study is an impoverished, multilingual area of a community where student-clinicians experience diversity and social justice issues that are taught in the curriculum and included in SLOs.

University-associated counselor training facilities can serve many useful purposes in the mental health practitioner and academic fields. These facilities provide an opportunity for students to apply course content and achieve SLOs detailed in the curriculum. The clinical setting promotes a thoughtful exchange of ideas and approaches that can be applied in treatment, assessment, education, and research (Hertlein & Lambert-Shute, 2007; Mittal, 2003; Mobley & Myers, 2011; Myers, 1994; Weir, Lee, Rodrigues, McWilliams, & Parker, 2013; Weir, Pierce, & Lucey, 2014). This exchange is brought to the forefront of counselor education by incorporating multicultural-focused SLOs that empower student-clinicians to be advocates for social justice and help them to understand the implications of equity in education. Of particular value is the practical, real world clinical counseling experience that can be derived from university-associated facilities. These types of facilities can help to meet the academic needs of students and counseling departments, while simultaneously addressing the mental health needs of the surrounding community. However, whether specific facilities are meeting these needs is not always assessed.

The literature has indicated that assessing the achievement of SLOs in master's level, Council for Accreditation of Counseling and Related Educational Programs (CACREP) accredited counseling programs can be difficult (Barrio Minton & Gibson, 2012). Also, although studies have provided relevant clinical counseling outcomes measurements in assessing university-associated counselor training facilities (e.g., Soberay, Faragher, Barbash, Brookover, & Grimsley, 2014; Tsai & Ray, 2011), research assessing student achievement of learning outcomes in these facilities is lacking. Furthermore, there is no standard, or common approach for objectively assessing the educational role of these facilities.

Barrio Minton and Gibson (2012) provided an overview of how CACREP accredited programs could assess, measure, and make meaning of SLOs. Programs with this type of accreditation have 36 to 69 SLOs. Barrio Minton and Gibson cited field experiences as "a rich opportunity to assess in vivo application of Skills and Practices SLOs" (p. 77). Assessments developed by faculty members and site supervisors also may offer an authentic viewpoint for understanding students' application of coursework and fieldwork supervision. CACREP also upholds standards for supervision and education, in conjunction with training facilities. These SLOs ensure student-clinicians attain a proficient understanding of counseling practice, and by linking student and clinical outcomes counselor educators can gauge the degree to which students are prepared to enter the field.

CACREP standards require training facilities to have individual counseling rooms, group workrooms, accessible audio and video recording equipment, noise reduction capacity, professional development resources and procedures to ensure client confidentiality. For CACREP accredited programs, faculty supervisors must have relevant training and experience in counseling and supervision, with a doctoral degree preferred (CACREP, 2009). Site supervisors must also meet several requirements: (a) degree in a counseling related profession with appropriate licensure and/or certification, (b) minimum two years of professional experience, (c) knowledge of the program's expectations, (d) relevant supervisory training, (e) participation in professional development opportunities, and (f) supervisory contracts. The regulations also state students, in either practicum or internship, must receive weekly interaction with a clinical supervisor in either a triadic or individual format, have the ability to review audio and video recordings for supervisory purposes, engage in weekly group supervision, develop familiarity with professional activities, and participate in formal evaluation of students' counseling abilities.

During the practicum and internships MFT/MFCC trainees are able to gain practical clinical experience while also meeting the requirements of the regulating bodies at the university and state level. Under the guidance of clinical supervisors, counseling trainees at university-associated training facilities can provide mental health services. By serving educational and clinical functions simultaneously, these facilities have become an invaluable resource for counseling trainees and the community (Mobley & Meyers, 2011), and gauging the efficacy of client treatment at these facilities is essential. However, few research studies have examined client outcomes at university-associated training facilities.

Prior Research on University-Associated Facilities

Soberay et al. (2014) hypothesized that university-associated facilities provide effective treatment to clients in their local community for co-occurring disorders and pathological gambling. In Soberay et al.'s study, the facility specialized in short term therapy, which included Cognitive-Behavioral Therapy and Solution Focused Brief Therapy. The researchers administered four separate questionnaires, including the Outcome Questionnaire (Version 45.2),

to evaluate treatment outcomes of 53 participants. Soberay et al. found a non-significant relationship between the number of co-occurring disorders and change in clinical outcomes between the first and sixth sessions. These results could indicate that training facilities do not adequately meet the mental health needs of the clientele, or that a further increase in treatment length was required for actual change to occur.

In contrast to Soberay et al.'s (2014) research, Tsai and Ray (2011) found positive client outcomes in their study of a CACREP accredited program's university-associated training facility. Tsai and Ray examined archival data for 365 youths between the ages of 3-10 years; 74.8% of the sample was Caucasian. Child-Centered Play Therapy (CCPT) was the primary treatment modality at the facility. The clinic used the Child Behavior Checklist (CBL) and Child and Adolescent Background Information Form (CABIF) to assess clinical outcomes. Tsai and Ray found that a statistically significant enhancement of clinical outcomes occurred over time. This finding was further reinforced by a large effect size (η^2 = .201). The healthier clinical outcome scores were not limited to those who completed treatment. All individuals in the study participating in CCPT had enhanced clinical outcomes including those who terminated treatment or dropped out of the study. However, individuals that terminated achieved the greatest degree of change in clinical outcomes. This study provided some evidence for the efficacy of treatment at university-associated mental health clinics that uphold CACREP's regulations.

Bhar and Silver (2014) conducted qualitative research at a university-associated clinic and found the treatment was beneficial for clients. The purpose of the study was to assess outcome measures with counselor trainee students. The clinic used a Client-Centered Therapy, supplemented with Cognitive Behavioral and Reminiscence Therapy perspectives in treatment of older adults by geropsychology trained students. The results indicated clients became more comfortable with the counseling and therapy towards the end of treatment. The results did not signify alleviation of symptomology; however, the clients reported feeling relaxed. Bhar and Silver did not address CACREP accreditation of the university-associated clinic, although this could have provided additional information on the training, experience, or goals of student-clinicians or supervising faculty.

CACREP Standards

The CACREP Standards delineate 40 SLOs for Marriage, Family, and Child Counseling programs (CACREP, 2009), and a portion of these SLOs were used in the current study. The purpose of these standards is to prepare students to be competent mental health professionals that are capable of thriving in a variety of settings. The SLOs are outlined by five sections: Foundations; Counseling, Prevention, and Intervention; Diversity and Advocacy; Assessments; and Research and Evaluation. Each of these sections contains two subsections that are "Knowledge" and "Skills and Practice." The SLOs set forth by the standards have been described as complex and difficult to assess; therefore, Barrio Minton and Gibson (2012) have suggested using creativity when evaluating achievement of these outcomes.

Selection of variables in the current study was based on SLOs in the 2009 CACREP standards. Figure 1 shows the "Skills and Practices" assessed. The current study aimed to measure two "Skills and Practices" SLOs under the "Diversity and Advocacy" category--F1 and F4. Diversity in the standards includes, but is not limited to ethnicity, language, or income.

The current study also aimed to measure SLOs covered in the "Counseling, Prevention, and Intervention" and "Assessment" standard. This standard highlights the clinical, systemic and theoretical orientation of the program with SLOs such as, "Uses preventative, developmental,

and wellness approaches in working with individuals, couples, families, and other systems such as premarital counseling, parenting skills training, and relationship enhancement" (CACREP, 2009, p. 36) and "Applies skills in interviewing, assessment, and case management for working with individuals, couples, and families, from a system's perspective" (CACREP, 2009, p. 38). In addition, this outcome emphasizes the importance of crisis assessment and intervention by including such SLOs as, "Understands the impact of addiction, trauma, psychopharmacology, physical and mental health, wellness, and illness and marriage, couple, and family functioning" (CACREP, 2009, p. 37) and "Demonstrates the ability to use procedures for assessing and managing suicide risk" (CACREP, 2009, p.40). Figure 1 outlines the SLOs utilized for the study based on variables available from the data.

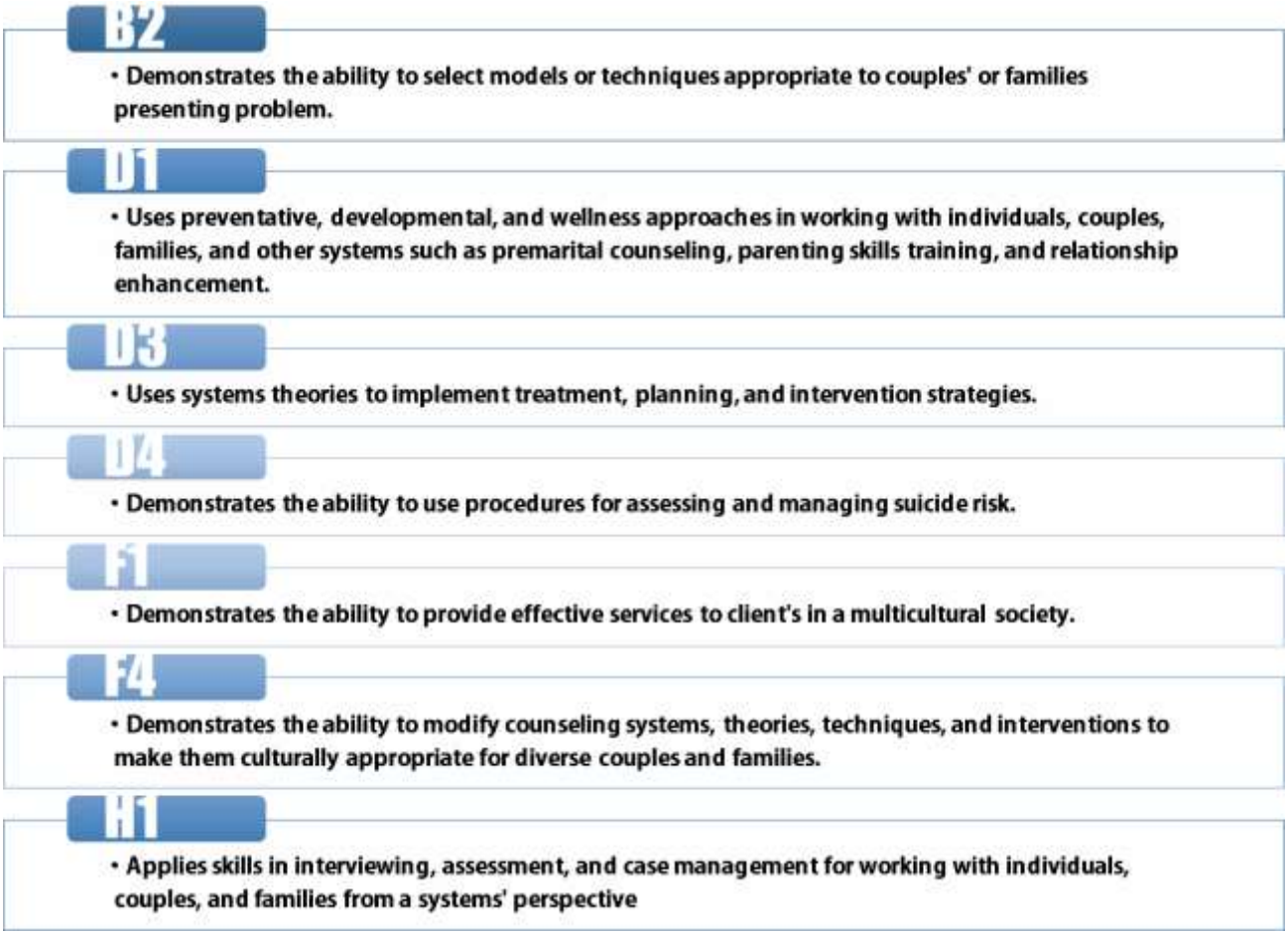

Figure 1. Coding of student learning outcomes. SLOs were coded utilizing alphanumeric designators representing the data.

Purpose

The purpose of the research was to examine the achievement of SLOs, as measured by clinical outcome scores, at a university-associated counselor training facility. The study was guided by two research questions: (a) to what degree does initial outcome score, length of treatment, impoverishment, suicidal ideation, substance abuse concerns, and unit of treatment predict clinical outcomes; and (b) to what extent do final clinical outcome scores differ by either

primary language spoken or ethnicity of client? Based on the lack of empirical research and objective assessment tools for counselor training facilities, the study contributes to the literature. The study may also provide insights to faculty, administrators, and mental health professionals who are interested in assessing achievement of SLOs and the clinical impact university-associated counselor training can have on local communities.

The selection criteria for variables were based on SLOs in the 2009 CACREP standards, availability of data, and relevance. The variables ethnicity, primary language, and income were considered indicative of multicultural competency measures. Unit of treatment (e.g., family or individual), suicidality, substance abuse, and clinical outcome measures were selected for measuring clinical counseling skills and MFT/MFCC specialization. For this study, treatment length was defined as length in days the client remains on the caseload of the practitioner and ranged from 6 to 725 days. Counselor trainees were instructed to assign relevant homework to the client as deemed necessary by both the trainee practitioner and supervisor. The rationale was that previous research had indicated clients who complete counselor assigned homework outside of sessions tend to score higher on clinical outcomes measures (Worthington, 1986).

The regional family counseling center that served as the case for this study functions as a source for mental health services, but also provides a training site for the CACREP accredited MFT/MFCC Masters Program at a Central California university. The non-profit site offers low-cost mental health services to individuals, couples, and families in a diverse and impoverished population. The site has served an increasing number of clients annually, growing from 425 in 2006 to approximately 9,800 in 2013. The staff comprises approximately 45 advanced practicum students and 40 non-graduated and graduated interns during the fall and spring semesters; on average, 10 staff members are bilingual (e.g., Spanish/English). Graduated interns have finished their practicum and are completing their placement hours prior to licensure. The center, given the pseudonym FFCC, has seven licensed clinical supervisors; four are full-time tenured faculty, and three are adjunct faculty members. FFCC's mission statement highlights practitioners' ability to assist in issues relating to social, marital, and familial adjustment.

Methodology

The research used a quantitative, longitudinal case study design. Quantitative longitudinal research permits researchers to observe natural occurrences without direct interference by measuring the same variable multiple times (Field, 2014). A case study enables analysis of a unit "in its particularity" (Check & Schutt, 2012, p. 387). Archival data from client cases in the years 2000-2014 were extracted using data mining of both active and closed files. The analyses included all sessions after the required screening interview; however, the screening interview may have affected the first session's clinical outcomes because counselor trainees were instructed to employ their counseling skills during the interview.

Sample

Criterion-based sampling was used to select participants; they must have completed more than one outcome measure, and been in treatment for no more than two consecutive years. A total of 261 individuals were included in the study. Of those who entered treatment, the age ranged from 17.42 to 67.69 years (M=34.11, S=10.11). Primary language spoken and ethnicity are shown in the results section (Table 1). For those who responded on the data form, the types of services were organized into five categories: individual adult (N=141, 54.0%), individual child

(*N*=8, 3.1%), marital/couple (*N*=55, 21.1%), family (*N*=28, 10.7%), and multimodal that included familial systems (*N*=29, 11.1%).

Of the respondents, 29.9% were male (*N*=78), 54.0% were female (*N*=141), and data for the remainder were missing (*N*=42, 16.1%). Of those who responded, 19.9% (*N*=52) stated they are or were suicidal; 43.7% (*N*=114) indicated they have or had substance abuse concerns; and 40.6% (*N*=106) stated they were either the victim or perpetrator of child abuse, domestic violence, rape, or another violent act.

Treatment

Prior to the first counseling session potential clients completed an intake with a counselor trainee by phone, or in-person. The purpose of the intake was to find out why the individual was seeking counseling, ensure proper client-clinic fit, and assess for current or previous history of crises or trauma. Counselor trainees were instructed to employ their counseling skills in assessing and intervening for crises, and probe for additional information. At the end of the intake, the counselor may have made community referrals to specialized agencies, scheduled an initial counseling session, or both.

Counseling sessions were provided at the university-associated outpatient clinic. Treating student clinicians may have attended 2-hour weekly group supervision sessions. The supervision may have included reviewing transcripts, progress notes, treatment plans, audio/video recorded sessions, and countertransference. Counseling generally consisted of 50 minute weekly sessions; however, this number was determined by the needs of the client and clinical judgment of the clinician and supervisor. Couples and family counseling participants received co-counseling services to facilitate a balance between the therapeutic team and clientele.

Instrument

Because FFCC utilizes the Outcome Questionnaire (Lambert, 1996) to assess overall psychosocial functioning of adult clients, this instruments was used for the study. This tool provides measures for three constructs and a total score, and due to the tool's availability was used in this study. The three subscales are Symptomatic Distress (SD), Interpersonal Relations (IR), and Social Role (SR). The guidelines for implementing the Outcome Questionnaire state that the total score is the most psychometrically sound measure of the individual's psychosocial condition (Burlingame & Lambert, 2007). Lambert (1996) derived SD from epidemiological studies where a significant number of participants diagnosed with any type of mental disorder presented symptoms of anxiety and depression. Therefore, the total survey is heavily loaded with items measuring the diagnostic features of anxiety and mood disorders, and substance abuse, as measured by SD.

IR reflects research suggesting that the presenting concern of clients is often relational. Due to this finding, a series of items were created to reflect familial, marital, and friendship conflict, isolation, inadequacy, and withdrawal. Social Role is the final construct measured by the survey. These items reflect functional impairment in social settings by measuring how qualities of the previously mentioned subscales can affect the client's ability to interact with others. Finally, the total score of the questionnaire has shown the greatest sensitivity to change in counseling center clients, and therefore, is an appropriate measure for a diverse counseling center population (Vermeersch et al., 2004). The range of possible scores for the total survey is between 0-180, with 63 or greater representing clinically significant distress (Lambert, 1996). Internal

consistency was measured in the current study using Cronbach's alpha for the initial total score (α=.93) and final assessment score (α=.94).

Impoverishment, suicidal ideation, substance abuse history, and unit of treatment were dummy coded with a '0' representing absence and '1' as a presence of each characteristic. For impoverishment, 51.7% (*N*=137) were impoverished and 48.3% (*N*=128) were non-impoverished. For suicidal ideation, 80.1% recorded an absence of suicidal ideation (*N*=209) and 19.9% (*N*=52) recorded a presence. An absence of substance abuse concerns was indicated by 56.3% (*N*=147), while 43.7% (*N*=114) reported the presence of one. Family systems type treatment was not requested by 57.5% (*N*=153), and was requested by 42.3% *N*=112).

Procedure and Data Analysis

All adults receive an Outcome Questionnaire (Version 45.2) at treatment outset, and were continuously assessed using the instrument throughout treatment. The assessment was to be administered again at the fourth and tenth sessions; however, some clients completed the surveys at different periodicities. Therefore, only the initial and final assessment intervals were used. Data analyses were performed using IBM SPSS 20.0. To determine if clinical outcomes were related to the predictor variables--initial scores, length of treatment, impoverishment, suicidal ideation, substance abuse history, and unit of treatment--multiple linear regression was used. For the research addressing differences in final outcome measure by either primary language or ethnicity, a One-Way Analysis of Variance (ANOVA) was used. The type I error rate was set for 0.05 for all analyses.

Results

Table 1 shows the descriptive statistics for treatment length measured in days (Tx Length), Outcome Questionnaire intake score (OQ Total 1), and Outcome Questionnaire final score (OQ Total 2). The Levene's Test of Homogeneity of Variance was not significant (Levene's Statistic|2,248|= 0.774, p= 0.46). The Analysis of Variance (ANOVA) revealed no significant differences in Outcome Questionnaire total score between primary language groups (F(2,248)= 0.412, p= 0.663). The Levene's Test of Homogeneity of Variance was not significant (Levene's Statistic|6,167|= 1.461, p= .194) for ethnicity. The ANOVA testing for mean differences in final Outcome Questionnaire total scores between ethnicities also was not significant (F(6,167)= 0.560, p= 0.762).

Table 1
Outcome Questionnaire Total Scores by Treatment Length, Primary Language and Ethnicity

	Mean	Std. Deviation	*N*
Tx Length	157.54	149.22	258
OQ Total 1	66.75	24.55	258
OQ Total 2	53.77	22.96	258
Primary Language			
English	54.45	23.21	210
Spanish	51.00	19.10	32
Other	50.56	28.54	9
Total	53.87	22.88	251
Ethnicity			
Caucasian	56.02	22.76	98
Latino-Chicano	52.06	21.19	54
Other	50.95	26.84	22
Total	54.15	22.81	174

Note: English=Primary Language English, Spanish=Primary Language Spanish, Other=Primary Language= Laotian, Chinese, Hmong, Other, or Multilingual.

Table 2 provides the correlation coefficients of final Outcome Questionnaire total score, intake Outcome Questionnaire total score, treatment length, impoverishment, suicidal ideation, substance abuse concerns, and unit of treatment. The multiple regression model predicting final Outcome Questionnaire Total Scores from intake Outcome Questionnaire Score, Treatment Length, Impoverishment, Suicidal Ideation History, Substance Abuse Concern, and Unit of Treatment is significant ($F(6,251) = 33.269$, $p<.001$), with an $R^2= 0.443$.

Table 2
Correlation Coefficients of Treatment Length, Intake Information, and Final Outcome Score

	OQ Total 1	OQ Total 2	Tx Length	Income	Suicidal	Substance Abuse	Tx Unit
OQ Total 1	1	.64***	.08	.07	.25***	.16**	-.25***
OQ Total 2	.	1	-.07	-.06	.14*	.10	-.03
Tx Length	.	.	1	.08	.02	.07	-.11*
Income	.	.	.	1	.08	.10	-.19**
Suicidal	.	.	.	.	1	.16**	-.12*
Substance Abuse	.	.	.	.	.	1	-.05
Tx Unit	.	.	.	.	.	.	1

Note: (*) p<.05, (**) p<.01, (***) p<.001, OQ Total 2= Final Outcome Questionnaire Total Score, OQ Total 1= Intake Outcome Questionnaire Total Score, Tx Length=Treatment Length, Income= Impoverishment, Suicidal= Ideation History, Substance Abuse= Substance Abuse Concerns, Tx Unit= Systemic or Individual Unit of Treatment

Table 3 displays the unstandardized B coefficients, standard error, standardized β coefficients, *t*-values, and *p*-values. The significant predictors were OQ Total (β=0.68, t=13.51, p<.001), Tx Length (β=-0.11, t=2.32, p=0.021), and Tx Unit (β=0.11, t=2.16, p=.031). Specifically, Tx Length β indicates that as length of treatment increases by one standard deviation (149.22), outcome scores decreases by 5.91.

Table 3
Regression Coefficients of Treatment Length and Initial Session Information

	Unstandardized		Standardized		
	B	Std. Error	B	*T*	*P*
Constant	13.57	3.92	.	3.46	.001
OQ Total 1	0.64	0.05	0.68	13.51	<.001
Tx Length	-0.02	0.01	-0.11	2.32	.021
Income	-3.52	2.22	-0.08	-1.59	.114
Suicidal	-0.75	2.85	-0.01	-0.26	.792
Substance Abuse	0.51	2.23	0.01	0.23	.820
Tx Unit	4.98	2.30	0.11	2.16	.031

Note: OQ Total 2= Final Outcome Questionnaire Total Score, OQ Total 1= Intake Outcome Questionnaire Total Score, Tx Length=Treatment Length, Income= Impoverishment, Suicidal= Ideation History, Substance Abuse= Substance Abuse Concerns, Tx Unit= Systemic or Individual Unit of Treatment

Discussion

University-associated training facilities for MFT/MFCC students serve several purposes; however, the primary focus of this study was to assess student achievement of learning outcomes set forth by CACREP, as measured by clinical outcomes at a counselor training facility. Clinical outcomes, which are recorded on the Outcome Questionnaire, provide information regarding clientele's psychosocial functioning, and in turn may indicate achievement of SLOs.

In examining the prediction of final Outcome Questionnaire (OQ) scores using initial OQ score, length of treatment, impoverishment, suicidal ideation, substance abuse concerns, and treatment unit, a significant prediction was found. As length of treatment increased, the OQ total score tended to become more favorable. This finding indicates that adult clients receiving counseling services from trainees for a longer duration tend to have scores showing a greater degree of psychosocial functioning than those in shorter treatment, which may suggest that the facility appropriately meets the mental health needs of adult clients. By appropriately addressing clients' clinical mental health needs, students demonstrated achievement of SLOs associated with providing counseling services, and specifically SLO B2 and D. Whether or not clients reported financial impoverishment did not significantly impact treatment outcomes, as shown by the multiple linear regression model. The results indicate equitable beneficence for clients regardless of income. In addition, income was not significantly correlated with length of time in treatment or final clinical outcome score. Student learning outcomes F1 and F4 are specified for multicultural sensitivity in counseling. Assessment of this clinical, and educational, outcome was accomplished by examining the degree clinical outcomes varied by client ethnicity and primary language spoken, along with financial impoverishment. Final clinical outcomes did not significantly differ by client ethnicity or primary language, and impoverishment did not impact clinical outcomes. These results indicate the client sample received similar clinical benefits from counseling trainees, independent of multicultural status. This finding may signify student progression towards multicultural learning outcomes.

The results of the overall study were dissimilar to previous research on university-associated counselor training facilities, where researchers found inconclusive results regarding clinical outcomes when counselor trainees delivered the services (Bhar & Silver, 2014; Soberay et al., 2014). In addition, the multicultural results may signify the counselor education model adequately prepared student clinicians in multicultural issues, that counselor-client diversity issues have a non-significant impact on treatment, or both. Therefore, further research measuring educational and clinical outcomes is needed.

Use of the Outcome Questionnaire in this study was meant to assess a wide breadth of symptoms simultaneously. The results indicated that a significant reduction in symptomology occurred, as predicted by initial score, treatment length, and treatment unit. This reduction of symptomology was also found in other research on non-university-associated treatment centers (e.g., Hubbard et al., 1997). The finding that a systemic unit of treatment significantly predicted the final clinical outcome score provides evidence for the achievement of learning outcomes associated with skills and knowledge related to implementing systemic techniques. The student learning outcomes demonstrated in this finding include B2, D1, D3, and H1, as these codes specifically denoted *systems*.

Previous researchers have found an enhancement in clinical outcomes utilizing the familial systemic as the unit of treatment in assisting with relational and other psychiatric disorders (Weir, Lee, Rodrigues, McWilliams, & Parker, 2013). The results of this study indicated that clients' clinical outcomes were enhanced significantly when the unit of treatment

was couples and family as opposed to individual counseling. These results indicate couples and family therapy are powerful units of treatment, and reflect the scope of practice in the MFT/MFCC profession.

Non-university-associated mental health clinics have demonstrated significant reduction of symptomology for those diagnosed with Major Depressive Disorder that included suicidal ideation (Crane et al., 2008). The university-associated training facility in this study demonstrated a significant improvement of psychosocial functioning regardless of suicidal ideation at the time of the first session. Therefore, this counselor training facility may provide at least similar levels of effective counseling services as other facilities. Counselor trainees providing this service are demonstrating SLO D4, suicide risk management.

This study was limited by the availability of outcome measures, and their implementation. Counselor trainees were responsible for utilizing the assessment, and the documentation was inconsistent and complex due to client-specific needs. Another limitation of this study was the lack of consistent periodicities between assessments. The assessment tool was to be implemented at the first, forth, and tenth sessions; however, individual clients and counselor-trainees did not consistently follow this direction. As a result, the researcher could not implement more powerful statistical analyses (e.g., repeated measures ANOVA). Also, the number of counseling sessions attended by each client was not recorded, and could not be analyzed. Future studies would benefit from utilizing number of sessions as a measured variable. Adding different intensities of care groups (e.g., outpatient with medical, inpatient, inpatient with medical) for comparison purposes might offer information as to whether counseling services provide more complete care than clients seeking other types of treatment, or non-treatment. A third limitation was the inadequate sample size for some classifications of ethnicities, as the researcher had to aggregate some ethnicities into broader categories. In addition, graduated and non-graduated interns may demonstrate different competencies, or levels of competency in relation to learning outcomes, and this was no factored into the research design. Finally, without a comparison control group it is difficult to assess whether the measured psychosocial improvement is due to extraneous unmeasured variables or the provided mental health services.

Conclusion

This longitudinal pilot study analyzed clinical outcomes at a university-associated training facility as a method for assessing achievement of SLOs. The descriptive statistics indicated that the sample tested represents a diverse and impoverished community. The sample included individuals presenting with substance abuse and suicidal ideation.

For adult clients a significant improvement of measured psychosocial functioning was found, as predicted by initial Outcome Questionnaire total score, length of treatment, and unit of treatment. The consistency with which a systemic unit of treatment positively predicted clinical outcomes may illustrate the efficacy of the specialized training MFT/MFCC students receive, the effectiveness of this therapeutic modality, or both. Counselor trainees in CACREP accredited programs are required to achieve an in-depth understanding of familial systems counseling, and demonstrate this understanding through "Skills and Practices." The purpose of this study was to assess the achievement of SLOs using clinical mental health outcomes. Counselor education faculty can utilize the information in this study to assess student learning outcome achievement simultaneously with clinical outcomes. The primary contribution of this study was to demonstrate an innovative, concrete, and succinct methodology of measuring achievement of student learning outcomes that could be informative for counselor education programs.

The authors posit counselor training facilities may be able to assess achievement of "Skills and Practices" SLOs simultaneously with data evaluation of client clinical mental health measures. The results of this pilot study provided an innovative methodology for assessing achievement of SLOs with clinical mental health outcomes. These proposed measures indicated the SLO outcomes appear to have been achieved. As the measures show promise for assessing SLOs, counselor educators should develop them further. Future research of university-associated counselor education training facilities should also measure the degree to which "Knowledge" areas of SLOs coincide with "Skills and Practices."

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