2018

The Relationship Between Counseling Students’ Theoretical Orientation and Treatment Outcomes

Jessica Holm  
*University of Texas at Tyler, jholm@uttyler.edu*

Cynthia Bevly  
*University of North Texas, cynthiabevly@gmail.com*

Elizabeth Prosek  
*University of North Texas, eap155@psu.edu*

Follow this and additional works at: https://repository.wcsu.edu/jcps

Part of the Higher Education Commons, Other Social and Behavioral Sciences Commons, and the Student Counseling and Personnel Services Commons

**Recommended Citation**

The Relationship Between Counseling Students’ Theoretical Orientation and Treatment Outcomes

Abstract
A MANCOVA was conducted to determine differences in client treatment outcomes based on counseling students’ theoretical orientations. Results indicated that at a training clinic, clients demonstrated statistically significant improvement and, students’ theoretical orientation did not significantly affect client outcomes. Pedagogical strategies are suggested for counselor educators and supervisors.

Keywords
theoretical orientation, treatment outcomes, counselor students

Author’s Notes
Jessica M. Holm, University of Texas at Tyler, Department of Psychology and Counseling. Cynthia M. Bevly, Elizabeth A. Prosek, University of North Texas, Department of Counseling and Higher Education. Correspondence concerning this article should be addressed to Jessica M. Holm, Department of Psychology and Counseling, University of Texas at Tyler, 3900 University Blvd., Tyler, Texas 75799. Email: jholm@uttyler.edu

This article is available in The Journal of Counselor Preparation and Supervision: https://repository.wcsu.edu/jcps/vol11/iss2/4
Professional counselors have an ethical responsibility to utilize evidence-based practice (e.g., American Counseling Association [ACA], 2014; Council for Accreditation of Counseling and Related Educational Programs [CACREP], 2015). Therefore, it is important for research to inform counselors about what counseling factors affect client treatment outcomes. Counseling factors affecting outcomes in treatment can include type of therapy or technique and extratherapeutic factors. Some of these factors are related to the client whereas other aspects emanate from treatment variables outside the individual, such as counselor theoretical orientation. The purpose of this study is to examine the relationship between counseling students’ theoretical orientation and client treatment outcomes.

**Theoretical Orientation**

Counseling theories help inform and guide counselors in how to assist clients in the change process (Fall, Holden, & Marquis, 2010). A counselor’s theoretical orientation serves as a guidebook both within and outside of session; supporting treatment planning, the establishment of goals, and informs client conceptualization (Fall et al., 2010). In understanding the importance of theory, some researchers investigated the effects of different therapies on client treatment outcomes. In a study comparing the effectiveness of cognitive-behavioral therapy, person-centered therapy, and psychodynamic therapy among 5,613 participants receiving treatment at a mental health clinic, Stiles, Barkham, Mellor-Clark, and Connell (2008) found no significant differences in clinical outcomes among these three theoretical approaches. Further, when Stiles et al. (2008) examined pre- and post-scores on a clinical outcomes assessment, participants in all three groups demonstrated improved mental health; indicating that none of the theoretical approaches were more effective than the others. Upon examination of several outcome measures and criteria for Major Depressive Disorder before and after treatment, investigators found no significant
Marriott and Kellett (2009) examined assessment and termination scores for 193 participants receiving mental health service at a community clinic and found clients experienced clinically significant improvement across theoretical approaches (i.e. cognitive analytic therapy, person-centered therapy, and cognitive-behavioral therapy). Furthermore, many researchers have investigated the dodo bird verdict, which is the assertion that different theoretical orientations are of widely similar efficacy (Budd & Hughes, 2009; Carroll & Rounsaville, 2010; Perepletchikova, 2009). Lambert (2015) examined factors that impacted client treatment outcomes and suggested that patient variables (e.g., motivation, support system, stressors, etc.) and common therapeutic factors (e.g., quality of therapeutic relationship, empathy, kindness, etc.) outweigh factors associated with specific theoretical approaches. Luborsky et al. (2002) found non-significant results when examining 17 meta-analyses comparing theories with another. Even as a result of comprehensive investigations, no one theoretical orientation to counseling has emerged as clearly more effective than all others regarding various treatment outcomes (Elliott, 2002; Lambert, 2004; Wampold, 2006).

Researchers have found that theoretical orientations, when compared to each other, do not seem to significantly impact treatment outcome; however, specific theories do seem to influence treatment outcome of specific disorders. For example, researchers have considered client treatment outcomes among theories regarding depression and anxiety. For example, Carlson, Emavardhana, and Englar-Carlson (2012) found positive client treatment outcomes in utilizing an Adlerian approach to depression. In one study, clients in Adlerian therapy experienced a significant decrease in their anxiety symptoms over a twelve-month period (Ferrero et al., 2007). In regards to cognitive behavioral therapy, the literature is rich with scholars who have demonstrated the effectiveness of this theoretical orientation in treating depression and anxiety (Ashworth et al., 2015; Clarke et al.,
Likewise, Cooper (2003) found that existential therapy had positive treatment outcomes for clients with depression and anxiety. Several researchers found positive outcomes for clients diagnosed with depression and anxiety when counselors adhered to person-centered therapy (Goldman, Greenberg, & Angus, 2006; MacLeod & Elliott, 2014). Additionally, Watson, Dealy, Todorova, and Tekwani (2014) found that choice theory/reality therapy decreased clients’ anxiety in their study. Also, clients with depression across a broad range of ages and cultural identities have benefited from choice theory/reality therapy (Wubbolding, 2000). Thus, clinicians utilizing each of these five theories have produced positive treatment outcomes for their clients with depression and anxiety disorders.

**Counseling Students**

CACREP (2015) mandated that counselor education programs provide evidence that student learning occurs in eight common core areas, including theories of counseling (see Standard 2.F.5.a; Section 3). Researchers speculated that counseling students’ development of a counseling theory includes some infusion of the personal (Spruill & Benshoff, 2000). Indeed, seminal work in counselor training development by Skovholt and Ronnestad (1992) indicated that the merging of personal and professional is key. They postulated that while in training programs, counseling students must build upon innate or natural helping characteristics to learn clinical methods. However, in a sample of clinical psychology students in the United Kingdom, Buckman and Barker (2010) found that in addition to the personal, training curriculum and supervision significantly impacted the chosen theoretical orientation. Conversely, in a qualitative study, researchers found that students did not perceive their personal characteristics to influence their choice in theory; but did identify themes that students were drawn to theories because they
preferred the techniques (Petko, Kendrick, & Young, 2016). Largely though, counselor educators have followed suggestions that having a theoretical framework behooves counselors because it provides structure for client conceptualization and treatment planning (Hansen, 2006). Finally, Halbur and Halbur (2011) encouraged counseling students to consider the efficacy of a theoretical orientation when considering the adaption of a theoretical framework.

**Purpose of the Study**

Theory identification is an important framework for counseling students (CACREP, 2015; Fall et al., 2010). However, previous literature emphasizes theoretical orientation among professional counselors, not students. Therefore, the purpose of our study was to examine the relationship between counseling students’ identified theoretical orientation and clients’ treatment outcomes. In alignment with previous researchers (Elliot, 2002), we hypothesized a significant difference would not exist among counseling students’ identified theoretical orientation and their clients’ treatment outcomes.

**Method**

**Participants and Procedures**

The Institutional Review Board (IRB) approved the use of post-hoc data from closed-client files of clients who received counseling services at an on-campus clinic sponsored by a CACREP-accredited counseling program. The clinic serves university students and community members. The clinic provides services to clients on a sliding scale and does not accept insurance or participate in third-party reimbursement. We conducted our secondary analysis on clinical data of community clients who sought counseling services at the clinic between 2006 and 2013, as per database availability. We derived the data for this study from documentation in the closed-client file, including the intake form, client treatment summary, and participant results from three subscales
of the Adult Self-Report (ASR; Achenbach & Rescorla, 2003). Two of the subscales on the ASR were constructed using criteria established in the *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition* (DSM; American Psychiatric Association, 1994). The three subscales of the ASR analyzed were Total Problems, DSM-oriented Depressive Problems, and DSM-oriented Anxiety Problems. The training clinic requires the ASR to be administered to all adult clients at intake and termination, or every 10 sessions for long-term clients. To safeguard client confidentiality, we did not include identifiable information in the dataset.

**Counseling student training.** The counseling students who provided services at the clinic represent master's and doctoral students in the counseling program. The master’s level and doctoral level counseling students registered in a practicum course before providing services at the clinic (approximately 40 master’s level counseling students and 10 doctoral level counseling students provide services at the clinic each semester). The counseling students received supervision from the counseling program as part of the practicum course. Master’s level counseling students participated in 1 hour of individual and 1.5 hours of group supervision each week. Doctoral counseling students participated in 1.25 hours of individual and 2 hours of group supervision each week.

The counseling program created a curriculum that fosters counseling students to identify with one guiding theory and use that theory exclusively during their training. In this process, students conceptualize their theory in papers during theory class, advanced skills class, and practicum. Moreover, practicing the skills from the identified theory with peer clients is supervised in theory class and advanced skills class. Counseling students may not receive a passing grade in the advanced skills course until they are able to conceptualize and practice from their identified guiding theory consistently. Additionally, in the diagnosis course, students learn to write treatment
plans for clients that must be congruent to their identified guiding theory. This includes extensive research of best practice according to their identified theoretical orientation. Thus, by the time counseling students enroll in Practicum, they are practicing from one theory in depth and receiving extensive supervision on how to counsel from the identified theory. The curriculum lends itself to the current study because the attention to practicing from one guiding theory helps create the theoretical orientation groups with more confidence.

Sample. The participants \((N = 174)\) of this study were former clients from the surrounding community of a large Southwestern public university. In this sample 75.3\% \((n = 131)\) of the participants identified as female and 24.7\% \((n = 43)\) identified as male. The majority of participants \((67.8\%, n = 118)\) identified as White, 10.3\% \((n = 18)\) as African American/Black, 9.8\% \((n = 17)\) as Asian, 6.9\% \((n = 12)\) as Hispanic/Latino(a), 3.4\% \((n = 6)\) as multiracial, and 1.1\% \((n = 2)\) identified as other. The mean age of the sample was 25.93 years old \((SD = 8.39)\). Of the 127 participants that reported household income, 44.9\% reported earning less than $15,000 per year, 14.3\% earned $15,000-26,000 per year, 23.5\% earned $26,001-40,000 per year, and 17.3\% earned more than $40,000 per year.

Participants indicated prior mental health-seeking behaviors with 46.6\% \((n = 81)\) of participants indicating prior mental health services from a psychiatrist, psychologist, or counselor and 2.9\% \((n = 5)\) reporting a previous mental health hospitalization. Participants self-reported current concerns from seven categories provided: mood \((59.2\%, n = 103)\), relationship \((54.6\%, n = 95)\), addictive \((6.9\%, n = 12)\), trauma/abuse \((21.8\%, n = 38)\), couple \((6.9\%, n = 12)\), other life \((81.6\%, n = 142)\), and other behavioral \((33.9\%, n = 59)\). Participants could identify more than one category of concern; therefore, percentages do not equal 100. Participants received an average of nine counseling sessions \((SD = 2.90)\) at the on-campus clinic.
The counseling students in the present study \((n = 171)\) were master’s and doctoral students in the counseling program. Counseling students report their theoretical orientation when completing treatment summaries after clients terminate counseling services. In our sample, 54.4% reported Adlerian/Individual psychology \((n = 93)\), 14.6% reported Choice Theory/Reality Therapy \((n = 25)\), 14% reported Cognitive Counseling/Cognitive Behavioral Therapy \((n = 24)\), 11.1% reported Person-Centered Counseling \((n = 19)\), and .6% reported Existential Counseling \((n = 10)\) as their identified theoretical orientation. Other counseling student demographics are not a documentation requirement at this university clinic.

**Measures**

**Intake form.** The clinic directors of the counselor-training clinic created a self-report intake form to collect biopsychosocial information. Clients provided information regarding general demographics, mental health history, family history, educational level, financial information, and current or past emotional or physical abuse. Also, clients identified presenting concerns from a list of seven categorical options: mood concerns, relationship concerns, trauma/abuse related concerns, addictive behaviors, life concerns, and other behavioral concerns. We used the intake form to establish demographic information of the sample.

**Client treatment summary.** Clinic directors developed the client treatment summary form to provide a treatment summary of the client’s counseling services upon termination. The counselor students used this form to document the client’s name, age, date of birth, gender, total number of sessions, and diagnosis. We used the client treatment summary form to identify the counselors’ self-reported theoretical orientation. Based on this information, we created five grouping variables: Adlerian/Individual psychology \((n = 93)\), Cognitive Counseling/Cognitive Behavioral Therapy \((n = 24)\), Existential Counseling \((n = 10)\), Person-Centered Counseling \((n =
19), and Choice Theory/Reality Therapy \((n = 25)\). At the on-campus clinic, counseling students may only counsel from one theoretical orientation. Supervision is provided based on theoretical orientation to ensure congruence of treatment.

**Adult Self-Report.** The 126-item ASR is a self-report measure used to assess emotional and behavioral problems for individuals ages 18–59 years (Achenbach & Rescorla, 2003). Participants score items on a 3-point scale for which 0 = *not true*, 1 = *somewhat or sometimes true*, and 2 = *very true or often true*. Example items include “I feel lonely,” “I feel I have to be perfect,” and “I feel overwhelmed by my responsibilities.” The ASR is categorized by four major scales: Adaptive Functioning, Syndrome, DSM-oriented, and Substance Use, as well as more than 25 subscales that provide detailed information on a client’s functioning across behavioral and emotional domains. For the purpose of this study, we used three ASR subscales: Total Problems, DSM-oriented Depressive Problems, and DSM-oriented Anxiety Problems. The Total Problems subscale score represents the sum of two categories: internalizing problems (e.g., somatic complaints, withdrawn behavior) and externalizing problems (e.g., aggression, intrusive behavior). Problems are categorized within eight domains: withdrawn, somatic complaints, anxious/depressed, rule-breaking behavior, aggressive behavior, intrusive behavior, thought problems, and attention problems. Total Problems subscale scores greater than or equal to 63 indicate clinical distress.

In a normative sample \((N = 300)\), the mean score on the Total Problems subscale for men and women ages 18–35 was 50.1 \((SD = 10; Achenbach & Rescorla, 2003)\). Achenbach and Rescorla (2003) reported that the Total Problems subscale demonstrated high test–retest reliability \((r = .94, p < .05)\). For our sample, the Total Problems subscale demonstrated a Cronbach’s alpha of .89. Achenbach and Rescorla (2003) reported that the DSM-oriented Depressive Problems
subscale demonstrated a normative mean of 54.1 for men ages 18–35 ($SD = 5.9$) and 54.3 for women ages 18–35 ($SD = 5.6$). On the DSM-oriented Anxiety Problems subscale, the normative sample mean for men and women ages 18–35 was 54.3 ($SD = 5.3$ and 5.4 for men and women, respectively). Achenbach and Rescorla (2003) reported that the DSM-oriented Depressive Problems subscale demonstrated high test–retest reliability ($r = .86, p < .05$). For our sample, the DSM-Depression subscale demonstrated a Cronbach's alpha of .819. Achenbach and Rescorla (2003) also reported the DSM-oriented Anxiety Problems subscale demonstrated high test-retest reliability ($r = .86, p < .05$). For our sample, the DSM-Anxiety subscale demonstrated a Cronbach's alpha of .770. The Cronbach’s alpha for our sample on the ASR subscales demonstrated good reliability ($\alpha = .925$). Achenbach and Rescorla (2003) presented evidence for content validity, criterion-related validity, and construct validity, including odds ratios and discriminant analyses across all subscales among different sample populations.

**Data Analysis**

We conducted all data analyses with SPSS 22.0 (International Business Machines, 2013). Data were screened and any client files missing variables were not included in any analysis. We used descriptive statistics and frequencies to present demographic information of participants. In order to investigate differences in client outcomes by students’ identified counseling theory, we first sought to determine whether or not statistically significant differences existed between pre- and post ASR subscale scores in our sample. Before conducting the paired $t$ tests to determine if statistically significant differences were present between pre- and post-ASR subscale scores, we tested assumptions to determine the extent to which the data were normally distributed. Visual representation of $p$ plots indicated the data were normally distributed. We also conducted an $a$ priori test using G*Power 3.1 (Faul, Erdfelder, Buchner, & Lang, 2009) to determine power and
sample size. For power at 0.90, a sample size of 36 participants was recommended, assuming an alpha level of 0.5.

We conducted a multivariate analysis of covariance (MANCOVA) to determine if the five different groups of students based on theoretical orientation significantly affect post-ASR subscale scores, after adjusting for pre-ASR subscale scores and client demographics. We decided a MANCOVA design was most appropriate because we can control for the pre-ASR subscale scores. We tested data for assumptions of MANCOVA and found Box’s $M (p = 0.572)$ non-significant; therefore, we accepted equality of covariance matrices. Furthermore, homogeneity of variance was supported by non-significant Levene’s test results ($p > 0.05$). According to G*Power *a priori* analysis, 162 participants were required given power = .80 and alpha = .05 (Faul et al., 2009). The original sample of 174 was reduced to 171 in MANCOVA analyses, given missing theoretical orientation information from three files.

**Results**

To begin our analysis, we conducted paired $t$ tests to determine if a statistically significant difference was present between pre- and post-ASR scores on three subscales: Total Problems, DSM-oriented Depressive Problems, and DSM-oriented Anxiety Problems. Total Problems scores were significantly lower at posttest ($M = 49.63, SD = 10.57$) than at pretest ($M = 52.72, SD = 10.53$), $t(173) = 6.21, p = .001, r = .43$. According to Cohen (1992), this is a medium effect size. DSM-oriented Depressive Problems scale scores were significantly lower at posttest ($M = 55.72, SD = 7.59$) than at pretest ($M = 58.51, SD = 9.05$), $t(171) = 5.62, p = .001, r = .40$. According to Cohen (1992), this is a medium effect size. DSM-oriented Anxiety Problems scale scores were significantly lower at posttest ($M = 55.58, SD = 6.99$) than at pretest ($M = 57.40, SD = 7.90$), $t(172) = 3.72, p = .001, r = .27$. This is a small effect size (Cohen, 1992) with calculated post hoc power
of 0.94 (Faul et al., 2009). Therefore, we determined that after receiving counseling, clients demonstrated positive treatment outcomes.

To test the main hypothesis for the next step in our analysis, we conducted a between subjects MANCOVA with pre- ASR subscale scores, as well as client’s gender, age, and race/ethnicity as the covariates. We used the three post-ASR subscales scores as the dependent variables. Using Pillai’s trace, there was not a statistically significant effect of counseling students’ identified counseling theory on all three post-ASR subscales, $V = .050$, $F(12, 468) = .665$, $p = .786$.

Discussion

The limitations of this study warrant caution when interpreting these data. First, the effect size reported in the results of the MANCOVA is small. Additionally, the data we used from the client treatment summaries in order to group participants into theoretical orientations is a self-report from the counseling students. Third, counseling students may not have implemented theoretically consistent counseling services. Fourth, given the non-significant differences between theories, there might be other common factors of counseling practice robust enough to deliver positive treatment outcomes. Fifth, the inclusion of both master’s and doctoral level students creates question regarding the students’ counseling experience and mastery of theory. Lastly, there was a threat to external validity because the sample represents one CACREP university.

The participants in our study reported fewer problems, decreased depressive symptoms, and decreased anxiety symptoms after receiving counseling services at a counselor training clinic regardless of the counseling students’ identified theoretical orientation. Our results support our hypothesis that counseling students’ identified theoretical orientation did not have a significant effect on clients’ positive treatment outcomes. This finding was congruent with Lambert’s (2015) assertion that common therapeutic factors (e.g., the therapeutic relationship, acceptance, empathy)
contribute to positive counseling outcomes, beyond specific theoretical approaches. Our results among students mirror that of studies with professional counselors in which clients’ experienced positive outcomes regardless of theoretical orientation. For example, Stiles et al. (2008) who examined behavioral therapy, person-centered therapy, and cognitive-behavioral therapy, found no significant differences in treatment outcomes among these three approaches. Moreover, our results corroborate with Marriott and Kellett (2009) who reported equally and clinically significant improvement across behavioral therapy, brief psychodynamic therapy, cognitive therapy, cognitive-analytic therapy, cognitive-behavioral therapy, and person-centered therapy. Additionally, our results are related to the study by Asay and Lambert (1999) who also demonstrated theory may not be as significant in client outcomes. Therefore, we might assume therapeutic factors other than counselor theoretical orientation accounted for change in client treatment outcomes.

Researchers have established the effectiveness of several theoretical orientations. Our results may indirectly support this notion because no differences in treatment outcomes were found between theories. For example, investigators have demonstrated the effectiveness of Adlerian/individual psychology in children, adolescents, and adults (Mosak & Maniaci, 2008). Furthermore, Butler, Chapman, Forman, and Beck (2006) examined 16 meta-analyses of cognitive therapy and found large effect sizes for a variety of mental health disorders. Additionally, existential therapy is effective across a wide range of mental health concerns and populations as well (Vontress, Johnson, & Epp, 1999). Gibbard and Hanley (2008) demonstrated substantial empirical support for utilizing person-centered theory with people experiencing depression and anxiety. Moreover, Litwack (2007) demonstrated the efficacy of choice theory/reality therapy by reviewing and citing over sixty empirical studies. Indeed, our results are consistent with the
existing literature on the relationship between these theories and positive client treatment outcomes.

It is encouraging that participants in our sample experienced a decrease in mental health distress. Based on our results, we concluded that counseling students’ identified theoretical orientation did not significantly impact treatment outcomes and that participants experienced positive treatment outcomes with all theories represented in the study. This outcome indicates that emphasis on shared therapeutic characteristics (i.e., acceptance, empathy) may be the vehicle for therapeutic change (Lambert, 2015). Given that counselor educators at counseling programs accredited by CACREP largely incorporate counseling theory into curriculum, there are various implications that counselor educators may choose to consider.

**Implications for Counselor Education**

Therapeutic orientation is a salient feature of counselor training programs. Indeed, CACREP (2015) requires counseling programs to incorporate instruction of theory and elements of the helping relationship into curriculum (Section 2.F.5.a; 2.F.5.f; 2.f.5.g; 2.F.5.j). Similarly, the ACA (2014) *Code of Ethics* mandates counselor educators teach therapeutic interventions substantiated by theory (F.7.h.). Therefore, it is worth exploring how counselor educators may incorporate theory into the curriculum. Counseling students might feel pressure to choose the most efficacious theory in order to achieve successful treatment outcomes with their clients. Guiffrida (2005) challenged counselor educators to utilize the emergence model when helping students with their theory identification. Counselor educators espousing the emergence model introduce students to interventions through nonjudgmental observation of themselves and their own practice. Armed with basic listening and attending skills, and a focus on the therapeutic relationship, counselor educators encourage counseling students to formulate interventions with clients based on their
instincts and preexisting knowledge. Indeed, Stargell (2017) indicated that the therapeutic relationship was the largest predictor of client outcome effectiveness. The role of the counselor educator is not to judge the interventions but to assist counselor trainees in identifying their natural helping instincts and to help students in considering the strengths and limitations of these interventions (Guiffrida, 2005). Thus, counselor educators could incorporate the examination of the counseling students’ natural, organically occurring relationship with clients into this emergence model when helping counselor trainees identify their theoretical orientation. The results of the current study may provide support for counselor educators to reassure students to choose the theory that best fits their style and way of being with clients, and to focus less on which theory is considered most effective. And for the purposes of research, the results of the study leave further questions regarding what elements of counseling may be linked to betterment of symptomology.

Counselor educators and supervisors may also use Spruill and Benshoff’s (2000) three phase framework for theory building with counseling students when identifying theoretical orientation. Phase one consists of identifying personal beliefs, phase two involves learning counseling theories, and phase three involves integration of personal beliefs into their identified theory. For example, during phrase three, a critical role for practicum and internship supervisors is to help students revisit, examine, and discuss their theory of counseling while actively practicing and attempting to integrate counseling skills, techniques, and concepts with their personal beliefs (Spruill & Benshoff, 2000). Counseling students’ factors are heavily interconnected to theory identification. Researchers found that theory exploration connected to the personal lead to a deeper understanding of counseling students’ worldviews (Hrovat & Luke, 2016). Therefore, counselor educators and supervisors could support students during all three phases of this framework to
choose the theory most consistent with their personal factors, rather than identifying with a theory they believe will produce more superior client treatment outcomes.

**Implications for Future Research**

The results of this study indicated treatment outcomes were not influenced by counseling students’ theoretical orientation. A future study investigating a potential threshold of influence of basic counseling skills versus theoretical practice might be of interest to counselor educators and supervisors. Future researchers could design studies that incorporate findings from multiple universities to increase generalizability of the results. In terms of internal validity, there are several confounding cultural variables for potential consideration in future studies (e.g., socioeconomic status, religion, gender, race/ethnicity) as researchers have posited that clients’ cultural factors could affect treatment outcomes (Grubbs et al., 2014; Kim, Zane, & Blozis, 2012). Moreover, the clinic uses doctoral and master’s level counseling students as clinicians. The database does not indicate whether a client received services from a doctoral or master’s level counselor trainee. Similarly, the cultural demographics of the students are not documented. Counseling programs that track outcomes from a training clinic might consider collecting this data. Furthermore, it is possible that multiple confounding counselor factors could have affected client outcomes as well. In this particular study, we focused on theoretical orientation as a variable impacting treatment outcomes. However, treatment outcomes may be influenced by several factors (e.g., number of sessions, presenting problems, client motivation, counselor factors) that were not controlled for in this study. Future researchers may consider development of a study including several other variables.
References


doi:10.1017/S0033291707001511


doi:10.1016/j.janxdis.2015.01.007