Addiction, Assessment, and Treatment with Adolescents, Adults, and Families

Carolyn Hilarski, PhD
Editor

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Addiction, Assessment, and Treatment with Adolescents, Adults, and Families has been co-published simultaneously as *Journal of Evidence-Based Social Work*, Volume 2, Numbers 1/2 2005.

9780789028877
Addiction, Assessment, and Treatment with Adolescents, Adults, and Families
Size: **212 x 152mm** Spine size: **15** mm Color pages: Binding**: Paperback**

Monographic Separates from the *Journal of Evidence-Based Social Work™*

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NEW YORK AND LONDON

First Published by

The Haworth Social Work Practice Press, 10 Alice Street, Binghamton, NY 13904-1580 USA

The Haworth Social Work Practice Press is an imprint of The Haworth Press, Inc., 10 Alice Street, Binghamton, NY 13904-1580 USA.

Transferred to Digital Printing 2010 by Routledge
270 Madison Ave, New York NY 10016
2 Park Square, Milton Park, Abingdon, Oxon, OX14 4RN

Addiction, Assessment, and Treatment with Adolescents, Adults, and Families has been co-published simultaneously as *Journal of Evidence-Based Social Work*, Volume 2, Numbers 1/2 2005.

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Cover design by Kerry E. Mack.

Library of Congress Cataloging-in-Publication Data

Addiction, assessment, and treatment with adolescents, adults, and families/Carolyn Hilarski, editor.
p. cm.
"Co-published simultaneously as Journal of evidence-based social work, Volume 2, Numbers 1/2 2005."
Includes bibliographical references and index.
ISBN-13: 978-0-7890-2886-0 (hc.: alk. paper)
ISBN-10: 0-7890-2886-7 (hc.: alk. paper)
ISBN-13: 978-0-7890-2887-7 (pbk.: alk. paper)
ISBN-10: 0-7890-2887-5 (pbk.: alk. paper)
1. Social work with teenagers. 2. Teenagers-Counseling of. 3. Teenagers-Substance use. 4. Teenagers-Alcohol use. 5. Teenagers-Family relationships. 6. Substance abuse-Prevention. 7. Alcoholism-Prevention. I. Hilarski, Carolyn. II. Journal of evidence-based social work.
HV1421.A33 2005
362.29´1532–dc22 2004030050

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Abstracting, Website/Indexing Coverage . . . . Year When Coverage Began

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(continued)

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Beliefs About Confrontation Among Substance Abuse Counselors: Are They Consistent with the Evidence?

Thomas Dale Davis, PhD

SUMMARY. Substance abuse researchers have recommended that substance abuse counselors and helping professionals use a non-confrontational counseling approach when addressing client denial. Yet little is known about substance abuse counselor beliefs about the use of confrontation. The purpose of this study was to use the Theory of Reasoned Action to qualitatively capture, quantitatively evaluate, and theoretically interpret beliefs about confrontation among 124 substance abuse counselors in residential and outpatient treatment facilities. Counselor beliefs accounted for nearly one-third of the variance in counselor intention to use a confrontational counseling approach. Counselors who engaged in professional development activities held more favorable beliefs toward a non-confrontational counseling approach than counselors who had not engaged in such activities. Based on the findings in this study, counselor beliefs hold promise as critical components in developing an

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[Haworth co-indexing entry note]: "Beliefs About Confrontation Among Substance Abuse Counselors: Are They Consistent with the Evidence?" Davis, Thomas Dale. Co-published simultaneously in *Journal of Evidence-Based Social Work* (The Haworth Social Work Practice Press, an imprint of The Haworth Press, Inc.) Vol. 2, No. 1/2, 2005, pp. 1-17; and: *Addiction, Assessment, and Treatment with Adolescents, Adults, and Families* (ed: Carolyn Hilarski) The Haworth Social Work Practice Press, an imprint of The Haworth Press, Inc., 2005, pp. 1-17. Single or multiple copies of this article are available for a fee from The Haworth Document Delivery Service [1-800-HAWORTH, 9:00 a.m. - 5:00 p.m. (EST). E-mail address: docdelivery@haworthpress.com].

http://www.haworthpress.com/web/JEBSW
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Digital Object Identifier: 10.1300/J394v02n01_01

empirical and theoretical understanding of the gap between research and practice in substance abuse counseling. *[Article copies available for a fee from The Haworth Document Delivery Service: 1-800-HAWORTH. E-mail address: <docdelivery@haworthpress.com> Website: <http://www.HaworthPress.com> ©2005 by The Haworth Press, Inc. All rights reserved.]*

KEYWORDS. Beliefs, confrontation, counselor, evidence-based practice, technology transfer, theory of reasoned action

INTRODUCTION

As evidence-based treatments emerge for addictions (Volpicelli, Pettinati, McLellan, & O'Brien, 2001), substance abuse researchers have recommended that substance abuse counselors and helping professionals use a non-confrontational counseling approach when addressing client denial (Miller & Rollnick, 2002). The use of confrontation has long been associated with substance abuse treatment (Fisher & Harrison, 1997). The traditional view has been that individuals with substance abuse disorders are manipulative and in denial. As a consequence, confrontation was viewed as necessary in order to break down patterns of conduct and psychological defenses. Addictions treatment research in the last ten years, however, has forced the field to reevaluate client motivation, stages of change, and the effectiveness of a confrontational counseling approach to address client denial. Miller and Rollnick (2002) have identified a range of studies suggesting that a supportive, reflective, and non-confrontational style of counseling is more effective in lowering client resistance than a confrontational style. Reducing client resistance is an important part of any treatment procedure. Resistant clients experience less benefit and are more prone to prematurely terminate from treatment than those who are cooperative (Beutler, Moleiro, & Talebi, 2002).

Increasingly, contrasts are drawn between a confrontational and a non-confrontational counseling approach to address client denial in substance abuse treatment (Connors, Donovan, & DiClemente, 2001; Miller & Rollnick, 2002; Velasquez, Maurer, Crouch, & DiClemente, 2001). Broadly, these contrasts include differences between collaborative and confrontational styles of counseling. A collaborative style involves a partnership that honors the client's expertise and perspective, while a confrontational style involves replacing client expertise with

imposed counselor directives. Additional contrasts include differences between evocation and education in the treatment process, where evocation presumes that motivation for change resides within the client, and education presumes that the client lacks key knowledge and is in need of counselor enlightenment.

Despite researcher-led efforts to promulgate a non-confrontational counseling approach among substance abuse counselors, little is known about substance abuse counselor beliefs about the use of confrontation. Identifying substance abuse counselor beliefs holds promise as an essential first step in understanding the gap (Lamb, Greenlick, & McCarty, 1998) between a science-based recommendation and its reception among counselors in communities of clinical practice. In the field of decision-making in clinical medicine, for example, studies have found that physician beliefs are factors that influence clinician decision making when it comes to adhering to science-based recommendations in clinical practice (Fang, Mittman, & Weingarten, 1996; Flores, 2000; Langley, Faulkner, Watkins, Gray, & Harvey, 1998). Support for beliefs as determinants of subsequent behavior has been summarized in a meta-analysis (Armitage & Conner, 2000) and in a review of the literature (Ajzen, 2001; Sutton, 1998).

Theory of Reasoned Action

This study used Ajzen and Fishbein's (1980) Theory of Reasoned Action (TRA) to qualitatively capture, quantitatively evaluate, and theoretically interpret beliefs about confrontation among substance abuse counselors. The TRA posits that antecedent, belief-based constructs offer explanatory power for subsequent intention and behavior. In the TRA, these constructs include intention, attitude, norms, and beliefs.

According to the TRA, and as applied to this study, a counselor's intention to perform a behavior is the best predictor of subsequent behavior. In deciding whether or not to perform a behavior, the counselor as decision-maker is influenced both by his or her own attitude and by the social norms the counselor perceives. A counselor's attitude is, in turn, based on the counselor's beliefs about the expected outcomes, or consequences, of the behavior, as well as his or her beliefs about the likelihood of those outcomes occurring. The counselor's perceived social norms are based on his or her expectations about how people important to the counselor feel about the counselor performing the behavior, as well as the counselor's motivation to comply with these referents. In de-

ciding whether or not to use a confrontational counseling approach to address client denial, then, and according to the TRA, the counselor as decision-maker is influenced by his or her own attitude, social norms, intentions, and beliefs about the use of confrontation to address client denial.

METHOD

Study Overview

In summary, the purpose of this study was to use the Theory of Reasoned Action to qualitatively capture, quantitatively evaluate, and theoretically interpret beliefs about confrontation among 124 substance abuse counselors in residential and outpatient treatment facilities. This study also examined the influence of counselor characteristics on specific beliefs and normative referents. These counselor characteristics included research experience, conference attendance, gender, journal subscriptions, and membership in a professional organization.

Counselors were recruited from outpatient and residential treatment facilities in four urban counties surrounding a Pacific Northwest metropolitan city. Of 18 treatment facilities contacted, 10 (56%) agreed to participate in the study. Study fliers were given to prospective respondents, with dates and times for the administration of a survey. Counselors were informed that they would be paid $13 for completing the survey. Surveys were administered during clinical staff meetings. The 11-page survey took an average of 20 minutes to complete.

Respondent Characteristics

Respondents were all certified substance abuse counselors who worked full-time in outpatient (36%) and residential (64%) chemical addiction treatment facilities in a Pacific Northwestern state. The sample was predominantly female (65%), had a mean age of 45 (SD = 11.3), and was predominantly Caucasian (83%). Number of years respondents had worked in the addictions treatment field ranged from 2- to 23-years, with an average of nine years (SD = 8.4). Most of the respondents had not participated in a research project (62%), did not subscribe to a professional journal (71%), were not members of a professional organization (56%), and had not attended a professional conference in the last

year (70%). Educational background of counselors included some college with no degree (21%), AA degree (26%), BA (30%), Masters degree (20%), and Doctorate (3%). Counselor characteristics were consistent with a Pacific Northwest treatment workforce survey of substance abuse counselors (Gallon, Gabriel, & Knudsen, 2003).

PROCEDURES

Clinical Terminology

Four certified substance abuse counselors, each with ten to fifteen years of substance abuse counseling experience, were consulted regarding the phrase "a confrontational counseling approach." Believing the phrase would create reactivity in a survey of substance abuse counselors, all four counselors independently recommended using a more neutral sounding phrase. Following the work of Atkinson (1995) on the importance of clinical practice discourse in communities of practice, the counselors were asked by the researcher to devise three alternative phrases for "a confrontational approach."

Counselors offered the following alternative phrases: (1) "a counselor-directive approach," (2) "a strategic-challenge approach," and (3) "a direct approach." Counselors were asked to independently classify each phrase as having low acceptability, medium acceptability, or high acceptability for use in a survey. Interrater reliability was 100 percent, with high acceptability for the phrase " a direct approach."

With consultation from the same counselors, the researcher constructed formal definitions for the new phrase and related terms. Counselors were asked to independently classify each definition as having low acceptability, medium acceptability, or high acceptability. Interater reliability was 100 percent, with high acceptability for the following definitions. A "direct counseling approach" to client denial is when the "counselor builds on good client rapport and tells the client directly that he or she is in denial." An "indirect counseling approach" to client denial is when the "counselor sustains empathic accepting responses toward the client, but does not focus on the client's denial." "Client denial" is present when the "client does not acknowledge or does not recognize the facts, implications, feelings, or need for change regarding their problem use with drugs or alcohol." Counselor consultants did not participate in the subsequent TRA survey.

Belief-Elicitation Interviews

To capture salient beliefs about the use of "a direct approach" to address client denial, and using TRA recommendations, the researcher conducted belief-elicitation interviews with a sample of substance abuse counselors similar to the larger sample of counselors to be surveyed (Ajzen & Fishbein, 1980). Eligible counselors for elicitation interviews were required to be certified substance abuse counselors with at least five to ten years of counseling experience. Counselors were recruited from two inpatient treatment facilities for one-on-one elicitation interviews. Residential treatment facilities were selected based on the high number of certified substance abuse counselors in each facility and the high number of years of counseling experience.

Counselors were given a written description of the study, with a sign-up sheet if they wanted to participate in an elicitation interview. Out of a total of 34 counselors who were offered participation in an elicitation interview, 19 counselors (56%) completed a one-on-one interview. Six males and thirteen females were interviewed by the same researcher. Each interview lasted an average of 30 to 40 minutes. Subjects were paid $13 for completing an interview.

In each belief-elicitation interview, the counselor was offered a short list with definitions used in the study. Each counselor was asked the following three belief-based questions: (1) "from your perspective, what are some positive outcomes associated with using a direct approach to address client denial?" (2) "what are some negative outcomes associated with using a direct approach to address client denial?" and (3) "which individuals or groups would have strong opinions about whether or not the average substance abuse counselor used a direct approach to address client denial?" Counselor responses were captured in notes taken by the researcher.

Following Lofland and Lofland (1995) on qualitative data analysis, beliefs and normative referents were coded by theme and were culled to reflect modal responses. The three modal beliefs identified for question one were: "Creating an honest dialogue about substance abuse"; "showing that clients can't play games about their use"; and "showing clients that you care about them even if they use." The three modal beliefs for question two were: "Making clients feel less bonded with counselor"; "making clients angry in treatment"; and "becoming judgmental about clients." The six modal normative referents for question three were "12-step programs"; "clients"; "client's spouses or partners"; "courts"; "substance abuse researchers"; and "substance abuse continuing educa-

tion courses." These modal beliefs and normative referents were then embedded in the TRA survey questionnaire. Counselors who participated in the elicitation interviews did not participate in the subsequent TRA survey.

Measures

Variables measured included all of the belief-based variables suggested by Ajzen and Fishbein (1980): intention to use a direct approach to address client denial, overall attitude toward the use of a direct approach, overall social norm about the use of a direct approach, perceived likelihood and evaluation of salient outcomes of using a direct approach, and perceived norms of salient referents and motivation to comply with those referents with regard to using a direct approach to address client denial.

Parametric tests were chosen after a visual inspection of detrended normal plots revealed reasonably normal distributions. The parametric tests and semantic scales used in this study are delineated by TRA founders Ajzen and Fishbein (1980), examined by Eagly and Chaiken (1993) for the measurement of complex constructs like attitudes, norms, beliefs, and intentions, and are used in a range of TRA studies. A draft of the initial questionnaire was pretested in a residential treatment facility for clarity and readability, and revised before beginning data collection. The wording and anchors of the items are listed below. Included in the survey were definitions of key terms.

Intentions. "How likely is it that you will use a direct counseling approach?" The response scale anchors were *very unlikely* [0] and *very likely* [6], with a midpoint labeled *50/50 chance* [3]. Higher scores indicate greater likelihood.

Attitudes. "Using a direct approach to address client denial would be . . ." Three semantic differential response scales were used. Anchors for the three scales were: *bad/good*, *pleasant/unpleasant*, and *harmful/helpful*. Two questions were reverse coded, and higher scores were assigned to the positive anchor. The average of the three items was used as the respondents' overall attitude toward using a direct counseling approach. For this multiple-item scale, a Cronbach alpha of .68 was recorded.

Perceived social norms. Perceived social norm was measured with one item: "What do most people and organizations that are important to you think about you using a direct counseling approach to address client denial?" This question was used with a response scale anchored with

think I definitely should not [1] use a direct counseling approach to *think I definitely should* [5] use a direct approach. Higher scores indicate more positive perceived norms.

Outcome beliefs. Six beliefs about the effects of using a direct approach were measured. These beliefs were: "creating an honest dialogue about substance abuse problems"; "making clients angry in treatment"; "showing that clients can't play games with you about their substance use"; "becoming judgmental about my clients"; "showing clients that you care about them even if they use"; and "making clients feel less bonded with you in treatment." Two items were constructed for each belief. The first was the individual's estimate of the likelihood of the outcome (*very unlikely* [0] to *very likely* [4]); the second was the individual's evaluation of that outcome (*very negative* [−2] to *very positive* [+2]), with a midpoint of *neither positive or negative* [0]. The computed value of each belief item is the product of the likelihood and evaluation ratings. These product terms are then summed to form the overall value of the outcome beliefs.

Normative beliefs. Norms of six referents were measured, under the general question, "How might other individuals and organizations view your use of a direct counseling approach to address client denial?" The referents were: "12-step programs"; "clients"; "client's spouses or partners"; "courts"; "substance abuse researchers"; and "substance abuse continuing education courses." Two items were constructed for each referent. The first was the respondent's perception of each referent's expectational norm: "[Referent] thinks that you . . ." Response anchors were *definitely should not* [−2] use a direct counseling approach to *definitely should* [+2] use a direct approach, with a midpoint of don't *care one way or another* [0] about using a direct counseling approach. The second item required the respondent to rate the statement, "Generally speaking, how much do you want to do what [referent] think(s) you should do?" Response anchors were *very little* [1] to *very much* [5]. The computed value for each normative belief is the product of the perceived referent norm and motivation to comply with the referent. These product terms are then summed to form the value of the normative referent beliefs. Mean scores for intention, overall attitude and norms, and outcome and normative beliefs, are reported in Table 1.

TABLE 1. Mean Scores on Intention, Overall Attitude and Norm, and Outcome and Normative Beliefs (N = 124)

Variable	Mean	SD
Intention	4.17	1.81
Overall Attitude	3.46	.57
Overall Norm	3.83	.80
Outcomes Beliefs		
Create Dialogue	1.54	.64
Anger Client	−.18	.86
Prevent Games	.53	1.13
Be Judgmental	−1.67	.58
Show Care	1.37	.77
Reduce Bonding	−.71	.93
Outcomes Likelihood		
Create Dialogue	2.72	.85
Anger Client	2.28	.72
Prevent Games	2.38	.99
Be Judgmental	.83	.92
Show Care	2.59	1.05
Reduce Bonding	1.65	.76
Norms		
Expectations		
12-Step	1.17	.90
Client	.26	1.01
Spouse/Partner	.83	.92
Courts	1.32	.76
Researchers	.33	.89
Continuing Education	.48	.86
Motivation		
12-Step	3.79	1.03
Client	2.22	.90
Spouse/Partner	1.83	.82
Courts	3.09	.99
Researchers	3.21	1.02
Continuing Education	3.50	.92

ANALYSIS STRATEGY

There were three steps in the analysis. First, correlations between the sum of the outcome belief cross-products and overall attitude were computed, as were correlations between the sum of the normative belief cross-products and overall perceived social norm. These correlations assess the adequacy of the sets of counselor beliefs to predict overall attitude or norm. Second, correlations between overall attitude and each outcome belief, and between overall perceived social norm and each normative belief, were also computed. These correlations assess the re-

lationship of each specific belief or referent to overall attitude or social norm. Third, intention was regressed onto overall attitude and norm.

RESULTS

Outcome beliefs and attitude. All six of the outcome beliefs were significantly correlated with overall attitude, as was the sum of the outcome beliefs. Correlations ranged from .26 to .51, as shown in Table 2.

Perceived social norm and normative beliefs. Four of the six normative referents were significantly correlated with overall norm, as was the sum of these normative referents. Correlations ranged from .19 to .31, as shown in Table 3.

Regression of intention to use a direct counseling approach onto attitude and norm yielded a significant R of .574, $F(2, 122) = 30.25$, $p < .001$. Using a hierarchical regression analysis, the independent variable of attitude was entered first followed by the variable norm. This strategy was based on the theoretical reasoning in TRA and its posited relationships among variables. In this study, an adjusted R^2 of .32 was used. Use of an adjusted R^2 offers a truer, though smaller, estimate of the degree to which attitude and norm account for variance in counselor intention to use a direct counseling approach when addressing client denial. Subse-

TABLE 2. Correlations of Outcome Belief Product Terms with Overall Attitude

Outcome Belief	Correlation with overall attitude toward using a direct approach
	r
Creating an honest dialogue about substance abuse	.51**
Becoming judgmental about clients	.41**
Making clients angry in treatment	.33**
Showing that clients can't "play games" about their use	.32**
Making clients feel less bonded with counselor	.31**
Show clients that you care about them even if they use	.26**
r, attitude with the sum of outcomes	.59**
n	124

**p < . 001, two-tailed

quent stepwise regression techniques did not detect additional associations. Regression results are displayed in Table 4.

Independent-sample t-tests were conducted to determine influence of counselor characteristics on specific beliefs. Counselors who had not attended a professional conference in the last year (M = 3.54, SD = .05) held on average a more favorable belief that substance abuse researchers wanted counselors to use a direct counseling approach when addressing client denial, as opposed to counselors who had attended a professional conference in the last year (M = 3.18, SD = .84), t(122) =

TABLE 3. Correlations of Normative Belief Product Terms with Overall Norm

Normative Belief	Correlation with overall perceived social norm toward using a direct approach *r*
Substance abuse researchers	.31**
Continuing education courses	.31**
12-step program	.27**
Clients	.19*
Partners	.15(NS)
Courts	.10(NS)
r, social norm with the sum of normative	.39**
n	124

*p < .01, two-tailed. **p < .001, two-tailed.

TABLE 4. Regression Analysis Summary for Overall Attitude and Subjective Norm Predicting Intention to Use a Direct Counseling Approach to Address Client Denial

Variable	*B*	*SEB*	β
Overall Attitude	1.28	.30	.41**
Overall Norm	.51	.21	.23*

Note. Adjusted R-squared = .32 (N = 122, p < .001)
**p < .001, *p < .05.

−2.20, p = .02. Male counselors (M = 4.70, SD = .47) on average held a more favorable belief that using a direct approach would create an honest dialogue about substance abuse, as opposed to female counselors (M = 4.45, SD = .71), t(122) = 2.34, p = .02. Counselors with no research experience (M = 2.86, SD = .74) also held on average a more favorable belief that a direct approach would create an honest dialogue, as opposed to counselors with research experience (M = 2.46, SD, .93), t(122) = 2.44, p = .04. Counselors who did not subscribe to a professional journal (M = 2.70, SD = 1.05) held on average a more favorable belief that a direct approach would show clients that they care about them even if they use, as opposed to counselors who did subscribe to a professional journal (M = 2.30, SD = 1.0), t(122) = −2.00, p = 0.4. Counselors who were a member of a professional organization (M = 2.43, SD = .63) held on average a more favorable belief that using a direct approach would make clients angry in treatment, as opposed to counselors who were not a member of a professional organization (M = 2.15, SD = .79), t(122) = 2.06, p = .04. Differential effects based on ethnic identity, education, or treatment setting were not detected.

DISCUSSION

The purpose of this study was to use the Theory of Reasoned Action to qualitatively capture, quantitatively evaluate, and theoretically interpret beliefs about confrontation among 124 substance abuse counselors in residential and outpatient treatment facilities. Also examined was the influence of counselor characteristics on specific beliefs about the use of a direct approach.

This study found that all six of the outcome beliefs were associated with overall attitude. That counselors believed that a direct approach to client denial might also create a judgmental attitude about clients, make clients angry, and make clients feel less bonded with the counselor, may suggest that these counselors are more aware of the risks that accompany the use of a direct counseling approach than the science-based literature seems to imply (Schneider, Casey, & Kohn, 2000). Due to an absence of ecological validity (Brunswik, 1943), research studies commonly underestimate (Garb & Boyle, 2003) the extent to which everyday counseling strategies among counselors are already congruent with best-practice recommendations. Additionally, these counselor beliefs about confrontation corroborate research on the effects of ruptures in

counselor-client bonds (Horvath & Symonds, 1991) and therapeutic alliances (Safran & Muran, 2000).

That counselors believed that a direct approach would create an honest dialogue about substance abuse, show that clients can't play games about their use, and show clients that counselors care about them even if they use, suggests the possibility that these counselors, in their everyday practices, have discovered a proactive utility in the use of a direct approach. These particular beliefs seem to run contrary to research on the deleterious effects of a direct counseling approach to address client denial. Yet it is possible to interpret these same beliefs as the kind of tacit and *in situ* expertise that are often eclipsed from research studies in clinical reasoning (Downie & Macnaughton, 2000).

The study also found four of the six normative beliefs were associated with overall norm. That counselors identified substance abuse researchers, continuing education courses, 12-step programs, and clients as holding strong beliefs about the use of a direct counseling approach, corroborates counseling texts on the importance of these specific groups in disseminating and offering feedback on counseling strategies among addictions treatment counselors (Perkinson, 2002).

Counselor attitude and norm predicted counselor intention to use a direct approach. Given research on the influence of attitudes (Petty, Wegener, & Fabrigar, 1997) and norms (Wood, 2000) on subsequent behavior, these two belief-based factors may hold explanatory power for understanding counselor utilization of science-based recommendations. Science-based recommendations in clinical medicine, for example, have had a limited effect on clinician behavior and often do not affect clinical practice (Davis & Taylor-Vaisey, 1997). As a result, studies have turned to, and have identified, clinician-beliefs as factors that influence clinician adoption of science-based interventions (Flores, 2000; Langley et al., 1998). Such clinician-centric studies hold promise for a deeper understanding of the gap (Lamb et al., 1998; Marinelli-Casey, Domier, & Rawson, 2002) between research and practice in substance abuse treatment counseling.

Yet in contrast to types of treatment and client characteristics, substance abuse counselors have been little studied in the substance abuse field (Ball et al., 2002; Najavits, 2002; Najavits, Crits-Christoph, & Dierberger, 2000; Najavits & Weiss, 1994; Siqueland et al., 2000). Wampold (2001) and Hubble, Duncan, and Miller (1999) have examined a broad range of empirical evidence in the counseling and psychotherapy literature, concluding that counselor effects account for greater

variance in treatment outcome than adherence to treatment protocol in manuals or particular treatment modality.

In this study, norm appears less important than attitude in predicting intention to use a direct approach to address client denial. Counselors across a range of clinical disciplines and settings hold eclectic orientations to counseling strategies (Jensen, Bergin, & Greaves, 1990). Counselors in this study may feel that attempts to instantiate science-based prescriptions around a direct counseling approach are incompatible with the kind of eclectic counseling frameworks developed in communities of local practice.

Counselors who engaged in the professional development activities of subscribing to a journal, being a member of a professional organization, and attending a professional conference in the last year, were more likely to hold accurate beliefs about what current researchers believe about the use of a direct, or confrontational, approach to address client denial. Counselors who did not engage in such professional development activities believed, erroneously, that substance abuse researchers wanted counselors to use a direct approach to address client denial. Also, clinicians with research experience held a less favorable belief that a direct approach would lead to an authentic dialogue about substance abuse problems, as opposed to clinicians without research experience. It may be that professional development and research experience, as socialization processes, keep counselors current on what the research community holds about substance abuse counseling strategies. While no published studies have addressed the influence of professional development on substance abuse counselors, there is evidence that substance abuse counselors desire increased professional development (Nall, Amodeo, Shaffer, & Bilt, 2000). Of additional interest, males held a more favorable belief that a direct approach created an honest dialogue with the client about substance abuse, as opposed to females. Studies have indicated that counselor gender can be an important component in treatment outcomes (Najavits & Weiss, 1994). A potential implication is that gender may moderate the way counselors view certain evidence-based counseling strategies.

Limitations of Study

This study and its findings are limited in a number of ways. First, a majority of counselors in the study were drawn from residential facilities, making generalization to outpatient facilities limited. Second, the majority of counselors were Caucasian. Counselor beliefs about a direct

approach may vary based on ethnic identity. Third, surveys about beliefs are vulnerable to errors in self-report recall (Fineberg, 1985; Manfredo & Shelby, 1988). Fourth, exchanging the phrase "a confrontational approach" for "a direct approach" was based on a consensus among experienced substance abuse counselors. It is likely that such a consensus, while necessary, is not a sufficient condition to determine clinical phrase equivalency. Fifth, while the use of multiplicative composites for outcome beliefs has been criticized on the grounds that it makes assumptions of ratio level measurements that are questionable (Evans & Sullivan, 2001; Hankins, French, & Horne, 2000; van den Putte & Hoogstraten, 1997), there is no consensus about a better way to operationalize beliefs. In addition, because multiplicative composites are the standard in the TRA literature, using another method would undermine comparisons between the analyses in this study and others. Also, because beliefs in TRA instruments are often limited to one question per belief construct, criticisms about the absence of reliability analysis in TRA instruments are a concern but not a focus in this study.

Based on the findings in this study, counselor beliefs hold promise as critical components in developing an empirical and theoretical understanding of the gap between research and practice in substance abuse counseling.

REFERENCES

Ajzen, I. (2001). Nature and operation of attitudes. *Annual Review of Psychology*, *52*, 27-58.

Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior.* New Jersey: Prentice-Hall.

Armitage, C. J., & Conner, M. (2000). Efficacy of the theory of planned behavior: A meta-analytic review. *British Journal of Social Psychology*, 40(4), 471-499 (2001).

Atkinson, P. A. (1995). *Medical talk and medical work*. London: Sage.

Ball, S., Bachrach, K., DeCarlo, J., Farentinos, C., Keen, M., McSherry, T., Polcin, D., Snead, N., Sockriter, R., Wrigley, P., Zammarelli, L., & Carroll, K. (2002). Characteristics, beliefs, and practices of community clinicians trained to provide manual-guided therapy for substance abusers. *Journal of Substance Abuse Treatment*, *23*(4), 309-318.

Beutler, L. E., Moleiro, C. M., & Talebi, H. (2002). Resistance. In J. C. Norcross (Ed.), *Psychotherapy relationships that work: Therapist contributions and responsiveness to patients* (pp. 129-143). New York: Oxford University Press.

Brunswik, E. (1943). Organismic achievement and environmental probability. *The psychological review*, *50*, 255-272.