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# Letter From the Publisher

**March 10th, 2011**

The National Board for Certified Counselors (NBCC) decided to launch a new academic journal. But not your average, run-of-the-mill journal—our goal was to create an exciting online resource for the counseling profession that would appeal to the more than 46,000 National Certified Counselors (NCCs) around the world and also speak to counselor educators, practitioners, graduate students, researchers, supervisors, and the general public.

Knowing that this new twist on the traditional journal was an ambitious undertaking and would require some out-of-the-box thinking, we formed a journal team. After many lively discussions, we had a raft of creative ideas for making this journal innovative and distinct, as well as informative, relevant and user-friendly.

As part of the process, we asked ourselves basic questions. What was our purpose for creating this journal? To promote the practice of professional counseling. How can we do this? By publishing original, peer-reviewed manuscripts covering a wide range of empirical, theoretical and innovative counseling topics, and delivering this journal in an efficient and timely manner.

When the role of publisher came up—and my name with it—I needed to figure out what a publisher does. A little Internet research revealed that a publisher connects writers to readers. That sounded easy enough.

For the very specific and important job of editor, the journal team selected Dr. J. Scott Hinkle, Director of Professional Development for NBCC. His professional knowledge and insight will serve him well in this demanding role.

And now, with our core journal staff in place, we are very pleased to welcome you to The Professional Counselor: Research and Practice (TPC). We are excited to be able to contribute this resource to the counseling profession and look forward to watching it grow and change to meet your needs.

Dr. Thomas W. Clawson  
Publisher, TPC  
President & CEO, NBCC

*Not your average, run-of-the-mill journal—our goal was to create an exciting online resource for the counseling profession that would appeal to the more than 46,000 National Certified Counselors (NCCs) around the world*





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# Assertiveness and Mental Health Professionals: Differences Between Insight-Oriented and Action-Oriented Clinician



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Michael Lee Powell  
Rebecca A. Newgent

**Aligning with a particular theoretical orientation or personal multi-theory integration is often a formidable task to entry-level counselors. A better understanding of how personal strengths and abilities fit with theoretical approaches may facilitate this process. To examine this connection, thirty-five mental health professionals completed a series of inventories to determine if passive counselors adhere to more nondirective, insight-oriented theories, while assertive counselors adhere to more directive, action-oriented approaches. Analyses revealed a significant difference between level of assertiveness and theoretical orientation, with action-oriented counselors demonstrating significantly higher levels of assertiveness than insight-oriented counselors. Implications for professional practice and counselor education are discussed.**

*Keywords:* assertiveness, theoretical orientation, action-oriented, insight-oriented, professional practice, counselors

Murdock, Banta, Stromseth, Viene, and Brown (1998) assert that research into the predictors of theory construction benefits the profession, because the information aids educators and clinical supervisors in helping students and beginning counselors to adopt an appropriate theoretical orientation. If counselors knew what personal strengths and abilities fit best with potential therapeutic approaches (Johnson, Germer, Efran, & Overton, 1988), then adhering to a model of therapy might be less complex, more satisfying, and essentially advantageous for their clientele. To assist in the alleviation of this issue, this study intends to examine the difference between insight-oriented and action-oriented counselors on level of assertiveness.

One of the most exciting and typically daunting tasks for counselors is choosing a theoretical orientation (Halbur & Halbur, 2005). Particularly, choosing one that adequately explains human development and functioning while also attempting to purport interventions that can facilitate greater personal growth and behavioral change in clients. Doing so, however, requires more than simple investigation into the diverse multitude of therapeutic approaches available to counselors. According to Patterson (1985), extensive self-exploration into one's own personality, values, abilities, and beliefs about human nature are equally salient, as is mandatory longstanding experience. Even then, counselors find that no one theory may suffice or help explain human complexity, which leads to personal theory construction, attempts at theoretical integration, and/or technical eclecticism (Corey, 2008).

Simplifying personal theory construction, or single/multi-theory integration, might assist counselors in choosing a theory that is a better fit for them. With over 400 available therapeutic models (Corsini & Wedding, 2008), counselors find themselves overwhelmed and indifferent to obtaining a sound theoretical foundation, and opt for more technique-oriented practices (Cheston, 2000; Freeman, 2003). Improvements in the manner in which counselors choose a theory would advance knowledge and understanding about the usefulness of adhering to a particular model of therapy. This would also increase treatment consistency and decrease the haphazard, inexperienced practice common with counselors who compile a therapeutic toolbox of empirically-supported interventions, but fail to grasp the rationale that supports their use (Corey, 2008). According to Corsini and Wedding (2008), good therapists follow a particular theory and use techniques associated with that theory and that "technique and method are always secondary to the clinician's sense of what is the right thing to do with a given client at a given moment in time" (Corsini & Wedding, 2008, p. 10). Further, MacCluskie (2010) discusses the role of theory in counseling and states that, "Practitioners need theories because it is our theory that drives our understanding and conceptualization of the client, the client's problem, and what strategies and techniques we might use to

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help the client grow and/or feel better” (p. 9).

## Style and Theoretical Orientation

Researchers interested in how a counselor constructs or chooses a particular theory examine multiple predictive factors. For example, Scragg, Bor, and Watts (1999) examined graduate students’ scores on personality assessments as predictors of a chosen theoretical model. They categorized students into two groups derived from their interest in studying directive or nondirective approaches, and found that students interested in the nondirective theories tend to prefer dealing with the abstract and working in an unstructured manner, and that students interested in learning more directive approaches appear to have more charm and leadership ability than the nondirective group. Similarly, Erickson (1993) found differences between theoretical groups based on personality assessment. She measured counselors using the *thinking/feeling* typology of the Myers-Briggs Type Indicator and found that thinking types reported preferences toward cognitive approaches (e.g., REBT), and feeling types favored affective approaches (e.g., Person-Centered).

Murdock et al. (1998) investigated whether one’s philosophical assumptions, interpersonal style, and supervisor orientation were consistent with specific theoretical orientations. They found that existential/gestalt counselors favor holistic philosophies rather than behavioral ones, which is consistent with their orientation. The systems/interpersonal group preferred observable and contextual causes of behavior rather than mental explanations, and the cognitive/cognitive-behavioral counselors scored high on elementarism (mechanistic, as opposed to holistic) due to their tendency to attend to client’s thoughts and behaviors as the source of change. The psychoanalytics, however, were the only group to score significantly higher on all other measures, meaning they tend to be more dominant interpersonally and prefer supervision from same-orientation supervisors.

Walton (1978) examined counselor self-concept, or view of personal self, as a potential factor predicting theoretical orientation. Among the factors analyzed on a semantic differential instrument, differences between complexity and seriousness were found between the psychodynamic counselor and one who adheres to a rational-emotive approach. Psychodynamic counselors reported themselves as serious and intricate, contrasted to the rational-emotive group who viewed themselves as simple and humorous.

Cummings and Luchese (1978) postulated, “The emergence of an orientation is one given to the whims of fate” (p. 327), not choice, which Steiner (1978) identified as a direct result of one’s chosen graduate training and persuasive influence from professors and supervisors. Norcross and Prochaska (1983) disagree, arguing that it is foolish to think “clinicians select an orientation largely on inexplicable or accidental grounds” (p. 197). They questioned experienced psychologists, not graduate students, as to what factors fueled their theory selection. Among the various influences obtained via survey, clinical experience rated as the most influential. Other factors such as values, graduate training, postgraduate training, life experiences, internship, and the theory’s ability to help in self-discovery received strong ratings. Client type, orientations of colleagues, undergraduate training, and accidental circumstances received a weak or no influential rating.

Although client type was found less influential than other predictive factors (Norcross & Prochaska, 1983), researchers who support technical eclecticism argue otherwise, asserting that a client’s needs should determine a clinician’s orientation (Cheston, 2000; Erickson, 1993). Supporters of this approach encourage clinicians to consider adhering to methodologies that utilize specific empathic techniques that build greater rapport and subsequent growth in clients who conceptually do better with a particular interpersonal style (Bayne, 1995; Churchill & Bayne, 2001). Bayne (1995), for example, contends that if a client appears less innovative and more practical, then he or she should receive cognitive-behavioral counseling, rather than approaches that require creative expression. Extroverts, according to Bayne (1995), are more suitable for humanistic or insight-oriented approaches and group counseling, because they tend to be more sociable and talkative.

## Assertiveness and Orientation

According to Gass and Seiter (2003), “Assertive people are not afraid to speak up, express their feelings, or take initiative” (p. 115). Assertive people are viewed as more socially influencing (Cialdini, 2001). In the clinical community, assertive people are sometimes defined by the amount of directiveness utilized in therapy. Kottler and Brown (2000) explain that directiveness involves one’s ability to influence an individual or family in such a way that they are motivated to make

positive changes one goal at a time. They state that by taking initiative, setting limits, structuring sessions, and defending their suggestions, directive counselors are more likely to use their expert position for positive therapeutic gains. However, this does not mean that assertiveness equals directiveness, per se. No known research exists to validate that the two are parallel.

Although assertiveness on the part of the counselor is an influential factor in client growth and development, and essential for conflict resolution (Ramirez & Winer, 1983; Smaby & Tamminen, 1976), it has not been isolated or tested as an actual predictor for theoretical orientation. This study aims to add to the list of predictive factors that potentially contribute to the adoption of a theoretical orientation by examining whether an experienced counselor's level of assertiveness relates to his or her chosen approach. Namely, whether passive counselors tend to adhere to more nondirective, insight-oriented theories, and if assertive counselors tend to adhere to more directive, action-oriented approaches.

## Method

### Participants

Thirty-five ( $N = 35$ ) mental health professionals from two mid-south community mental health agencies participated in this study. Fifty packets containing each instrument were hand delivered to qualifying participants, resulting in a 70% response rate. Purposive sampling was used to ensure that respondents had at least two years of clinical experience, and to obtain enough participants from different experience levels. The reason experienced counselors were chosen is that they have had more time to practice different approaches and are more likely to have identified the orientation that best fits them, whereas "students are not capable of formulating a theory," since "theories are developed by mature individuals on the basis of a thorough knowledge of existing theories and long experience" (Patterson, 1985, p. 349).

Participants had the following licenses: Clinical Psychologist ( $n = 1$ ); Counseling Psychologist ( $n = 3$ ); Psychological Examiner ( $n = 7$ ); Social Worker ( $n = 12$ ); and Professional Counselor ( $n = 13$ ). There were 20 females and 15 males. Nineteen participants reported between 2–5 years of experience, while six reported having between 5–10 years of experience, and 10 reported having more than 10 years of experience. Sixteen participants reported adhering to an insight-oriented approach, and 19 were action-oriented. Each participant self-identified as Caucasian.

### Instruments

*Assertiveness Self-Report Inventory.* The Assertiveness Self-Report Inventory (ASRI; Herzberger, Chan, & Katz, 1984) is a brief measure of behavioral assertiveness, developed intentionally with adequate validity data in mind. Other measures of assertiveness have been criticized for not reporting psychometric information (Corcoran, 2000). The instrument is a 25-item measurement with a forced-choice, true/false scale, with half of the items reverse scored to decrease the likelihood of a response set.

Herzberger et al. (1984) report high internal consistency with the ASRI (Cronbach's Alpha = .78), strong test/retest reliability ( $r = .81, p < .001$ ), and strong convergent validity with the Rathus Assertiveness Schedule (Rathus, 1973) during two testing sessions ( $r = .70, p < .001$ ;  $r = .63, p < .001$ ). For further validation, two criterion-related studies were conducted measuring participants' ability to offer assertive-like solutions to social dilemmas and peer ratings of participants' assertiveness. Both studies produced significant relationships to scores on the ASRI ( $r = .67, p < .001$ ;  $r = .40, p < .005$ ).

*Bakker Assertiveness-Aggressiveness Inventory.* The Bakker Assertiveness-Aggressiveness Inventory (AS-AG; Bakker, Bakker-Rabdau, & Breit, 1978) is a 36-item inventory that measures two dimensions of assertiveness necessary for social functioning: the ability to refuse unreasonable requests (Assertiveness) and the ability to take initiative, make requests, or ask for favors (Aggressiveness), with both scales available for use as separate 18-item instruments (Corcoran, 2000). Each item provides the reader with a specific conflict situation and a specific behavioral response, and asks examinees to rate the likelihood that they would respond in the same manner. Half the items contain an assertive response, whereas the other half contains more passive, submissive responses (Bakker et al., 1978). Each item is scored on a five-point likert scale ranging

from almost always (AA = 1) to almost never (AN = 5).

Normative data were collected from seven groups, including health professionals, city employees, college students, and clients of an adult development program seeking assertiveness training. Test-retest reliability data are strong for both scales: .75 for the assertiveness scale and .88 for the aggressiveness scale, and split-half reliability of .58 and .67 for both scales, respectively (Bakker et al., 1978). Validity measures were obtained by comparing each group with the college sample, since it was the largest ( $n = 250$ ). The only group to significantly differ in assertiveness/aggressiveness was the adult development program clients ( $p < .001$ ), confirming “that the scales are sensitive to differences in functioning” (Bakker et al., p. 282).

*The Simple Rathus Assertiveness Schedule.* The Simple Rathus Assertiveness Schedule (SRAS; McCormick, 1985) is a revised measure of the Rathus Assertiveness Schedule (Rathus, 1973) designed to improve the original measure’s readability and usability (Corcoran, 2000). A 30-item instrument, the schedule measures social boldness by asking readers to rate themselves on various personal inclinations, such as *I enjoy meeting and talking to people for the first time and I have sometimes not asked questions for fear of sounding stupid* (McCormick, 1985). Items are scored on a six-point Likert scale, ranging from 6 (very much like me) to 1 (very unlike me).

Reliability for the SRAS is “very good” (Corcoran, 2000, p. 746) when compared with the original Rathus, with the correlation between odd and even items on both versions at .90, and overall total scores correlating at .94, suggesting that “a satisfactory degree of equivalence had been obtained between both measures” (McCormick, 1985, p. 97). The original Rathus reported test/retest reliabilities of .77 ( $p < .01$ ) and strong convergent validity with other measures of assertiveness.

## Procedure

Participants were placed in one of two groups based on their reported theoretical orientation, which Kottler and Brown (2000) categorized as insight-oriented and action-oriented. Insight-oriented approaches believe that self-discovery and revelation is the path to true growth and consists of humanistic, psychodynamic, interpersonal, and experiential theories. Action-oriented approaches are defined as theories that utilize direct interventions and action for symptom reduction. Theories within this category are behavioral, cognitive, strategic, and solution-focused in nature.

Both groups completed an assessment packet, consisting of an informed consent form, a demographic sheet, and the three measurements of assertiveness. Presentation of instruments was identical in both groups. Scores were totaled and compared between each group. Consent forms were kept separate to ensure confidentiality of the information.

## Results

A Pearson product-moment correlation analyzed the relationship between all three assertiveness instruments to investigate convergent validity. This analysis revealed a significant positive correlation between the ASRI and SRAS ( $r = .78, p < .0001$ ) between the ASAG and SRAS ( $r = .56, p = .0017$ ) and between the ASRI and ASAG ( $r = .51, p = .0004$ ). The nature of the correlation coefficients indicates a strong convergent validity between all three instruments.

Data were analyzed via a one-way analysis of variance (ANOVA) in order to find differences between insight-oriented and action-oriented counselors on three assertiveness instruments. Additionally, effect sizes are reported as small  $\geq .02$ , medium  $\geq .13$ , and large  $\geq .26$  (see Steyn & Ellis, 2010). Sample means and trial effects are presented in Table 1. The ANOVA on the ASRI revealed a significant difference between each group:  $F(1, 33) = 7.75, MSE = 7.66, p < .0088$ . The mean score for the insight-oriented group was 13.40 ( $SD = 2.92$ ), and the mean for the action-oriented group was 16.05 ( $SD = 2.63$ ). The multivariate effect size  $\eta^2 = .19$  indicates a moderate relationship between theoretical orientation and participant assertiveness.

**Table 1***Comparison of Group Differences in Level of Assertiveness across Orientation*

	Insight Oriented ( <i>n</i> = 16)		Action Oriented ( <i>n</i> = 19)		Trial Effects		
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>P</i>	multivariate $\eta^2$
ASRI	13.40	2.92	16.05	2.63	7.75	.0088	.19
AS-AG	101.94	29.11	120.84	14.30	6.25	.0176	.16
SRAS	106.06	11.39	119.11	15.79	7.58	.0095	.19

*Note.* *N* = 35. Lower means indicate lower levels of assertiveness. ASIR = Assertiveness Self-Report Inventory and ranges from 0–25. AS-AG = Bakker Assertiveness-Aggressiveness Inventory and ranges from 36–180. SRAS = The Simple Rathus Assertiveness Schedule and ranges from 30–180.

Next, the ANOVA on the AS-AG revealed a significant difference between each group:  $F(1, 33) = 6.25$ ,  $MSE = 496.53$ ,  $p < .0176$ . The mean score for the insight-oriented group was 101.94 ( $SD = 29.11$ ), and the mean for the action-oriented group was 120.84 ( $SD = 14.30$ ). The multivariate effect size  $\eta^2 = .16$  indicates a moderate relationship between theoretical orientation and participant assertiveness.

Finally, the results of the ANOVA on the SRAS revealed a significant difference between each group:  $F(1, 33) = 7.58$ ,  $MSE = 195.05$ ,  $p < .0095$ . The mean score for the insight-oriented group was 106.06 ( $SD = 11.39$ ), and the mean for the action-oriented group was 119.11 ( $SD = 15.79$ ). The multivariate effect size  $\eta^2 = .19$  indicates a moderate relationship between theoretical orientation and participant assertiveness.

## Discussion

The purpose of this study was to determine if passive counselors tend to adhere to more nondirective, insight-oriented theories, and if assertive counselors tend to adhere to more directive, action-oriented approaches. Data from scores on the Assertiveness Self-Report Inventory, the Bakker Assertiveness-Aggressiveness Inventory, and the Simple Rathus Assertiveness Schedule suggest that a significant difference does exist between insight-oriented and action-oriented counselors on level of assertiveness, suggesting that level of assertiveness in mental health professionals is a viable factor in theoretical orientation development. In fact, action-oriented counselors had significantly higher levels of assertiveness than the insight-oriented counselors did across all three measures, with the variability of the scores on the AS-AG indicating substantial differences between the two orientations. Not surprisingly, the results on all three measures were in the same direction, consistent with the convergent validity of the measures.

Effect size analyses indicate that moderate relationships exist between theoretical orientation and participant assertiveness, which are clinically meaningful and of practical significance in addition to statistical significance (LeCroy & Krysik, 2007). This finding supports Kottler and Brown's (2000) position on the nature and quality of directiveness in the therapeutic relationship. That is how assertiveness on the part of the counselor can be an influential factor in client growth and development. This suggests that possibly the two may in fact be parallel. Nonetheless, according to the results, counselors that choose directive approaches appear to be assertive themselves.

Previous research has investigated several predictive factors that contribute to the adoption of a theoretical orientation by counselors (Bayne, 1995; Erickson, 1993; Freeman, 2003; Johnson et al., 1988; Murdock et al., 1998; Norcross & Prochaska, 1983; Steiner, 1978; Walton, 1978). No one study, however, has been able to identify each factor interdependently, opting to isolate specific factors independently via multiple examinations. This study aimed to add to the established list of identified predictive factors by examining whether an experienced counselor's level of assertiveness relates to his or her chosen approach. We believe that we can now add assertiveness to the list of predictive factors, which

include personality type, therapist training, age of clients, and level of counselor development. A limitation in this study was the ability to generalize to different races. All mental health professionals that participated were Caucasian. Another possible limitation was that the participants self-reported on their theoretical orientation.

## Implications and Conclusions

The counseling profession benefits from research designed to identify the predictive factors leading to one's choice of a theoretical orientation. Graduate programs, for example, could use the current data to facilitate the process of theory formation and adoption, including theoretical integration and technical eclecticism, in addition to general instruction that covers the history of theory and the art of the therapeutic relationship. Supervisors of beginning clinicians might profit, not only in facilitating a supervisee's development of professionalism, but by assisting them to re-examine their strengths and limitations, which may lead to an investigation into new theoretical possibilities that create a better "clinical fit." Even agencies, conceivably, could utilize the predictors in an attempt to match a client to a particular counselor based on theory and personality. Although this may not seem practical, such an effort could be a positive ingredient for increasing community outcome measures and reducing counselor burnout. Further research supporting this idea would be beneficial. Conversely, further research is necessary to investigate whether matching a counselor's personality to a theoretical orientation is actually empirically effective. This study is limited by the fact that it does not provide support for such a hypothesis, but does support its consideration.

Although the list of predictive factors leading to a counselor's choice of orientation is extensive and complex, and no study has been able to identify them in their entirety, it does not mean that isolating the factors for clinical research is meaningless. On the contrary, identifying the predictive factors is advantageous. Doing so could make theory adoption more counselor-centered and satisfying to the adopting practitioner, who can choose an approach that "fits" best.

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# Relationship Between Graduate Students' Statistics Self-Efficacy, Statistics Anxiety, Attitude Toward Statistics, and Social Support



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Statistics plays an integral role in graduate programs. However, numerous intra- and interpersonal factors may lead to successful completion of needed coursework in this area. The authors examined the extent of the relationship between self-efficacy to learn statistics and statistics anxiety, attitude towards statistics, and social support of 166 graduate students enrolled in master's and doctoral programs within colleges of education. Results indicated that statistics anxiety and attitude towards statistics were statistically significant predictors of self-efficacy to learn statistics, yet social support was not a statistically significant predictor of self-efficacy. Insight into how this population responds to statistics courses and implications for educators as well as students are presented.

*Keywords:* graduate students, statistics, anxiety, self-efficacy, attitudes, social support

More graduate programs in various social science fields are requiring students to complete research methods including statistics courses or a blended combination thereof (Davis, 2003; Schau, Stevens, Dauphinee, & Del Vecchio, 1995). These course requirements pose a dilemma for educators and students because many students perceive statistics as difficult and unpleasant (Berk & Nanda, 1998). Some students can struggle in statistics courses as a related complication of this perception as well as other intrapersonal factors related to the course.

To investigate graduate students' experiences in statistics courses, researchers studied different avenues to understand what occurs with students so steps can be taken to improve learning as well as satisfaction in college statistics courses. For instance, researchers suggested non-cognitive factors such as motivation for further learning (Gal & Ginsburg, 1994; Finney & Schraw, 2003), statistics self-efficacy (Onwuegbuzie & Wilson, 2003), and attitude toward statistics (Araki & Schultz, 1995; Elmore, Lewis, & Bay, 1993; Waters, Martelli, Zakrajsek & Popovich, 1988; Wise, 1985) should be assessed and addressed with students. Finney and Schraw theorized that the difficulty students experience with statistics is not necessarily due to lack of intelligence or poor aptitude, but may be a result of the above mentioned factors. Bonilla (1997), Cohen and McKay (1984), and Solberg and Villarreal (1997) hypothesized that social support may act as a buffer against the development of these psychological manifestations.

The purpose of this study was to examine the various factors that have been introduced in previous research in one comprehensive study. The goal was to determine how graduate student self-efficacy to learn statistics is predicted by statistics anxiety, attitude toward statistics, and social support (Gall, Gall, & Borg, 2007). The overarching intent was to document graduate student self-efficacy to learn statistics and identify how certain variables influence statistics self-efficacy (Pan & Tang, 2005).

## Self-Efficacy to Learn Statistics

In order to understand the implications of this research, an explanation of the key variables found in the literature review must first be discussed. Self-efficacy to learn statistics is the dependent variable in this study. Bandura (1977) originally defined general self-efficacy as one's judgments of his or her capabilities to organize and carry out courses of action required to attain specific types of performances. Bandura asserted that self-efficacy beliefs are manifested from four primary sources, which include the following: (a) personal accomplishments, (b) vicarious learning experiences, (c) verbal persuasion, and (d) emotional arousal. These primary sources lay the foundation for building the concept of self-efficacy to learn statistics. Finney and Schraw (2003) defined self-efficacy to learn statistics and developed an assessment to measure

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this phenomenon. Self-efficacy to learn statistics is an individual's confidence in his or her ability to successfully learn statistical skills necessary in a statistics course.

A large amount of information is available on self-efficacy related to academic performance (Lent, Brown, & Larkin, 1984, 1986; Pajares, 1996; Pajares & Miller, 1995; Zimmerman, 2000; Zimmerman, Bandura, & Martin-Pons, 1992). However, little is known specifically about self-efficacy to learn statistics. Finney and Schraw (2003) investigated whether self-efficacy to learn statistics is related to performance in a statistics course and whether self-efficacy to learn statistics increased during a 12-week introductory statistics course. One hundred and three undergraduate students from a large Midwestern university participated in the survey. Finney and Schraw reported a positive relationship between statistics self-efficacy and academic performance as well as an increase in self-efficacy to learn statistics over the duration of the course. Onwuegbuzie (2000) also reported students with the lowest levels of perceived competence had the highest levels of statistics anxiety. Additionally, Pajares and Miller (1995) documented an inverse relationship between self-efficacy and math anxiety.

## **Statistics Anxiety**

Statistics anxiety is one of the three independent variables in this study. Researchers have documented a large amount of information on statistics anxiety over the years. For instance, there are multiple definitions of statistics anxiety available in the literature. Onwuegbuzie, DaRos, and Ryan (1997) defined statistics anxiety as "a state-anxiety reaction to any situation in which a student is confronted with statistics in any form and at any time" (p. 28). Cruise, Cash, and Bolton (1985) defined statistics anxiety as "the feelings of anxiety encountered when taking a statistics course or doing statistical analyses: that is, gathering, processing, and interpret[ing]" (p. 92). The latter is the definition utilized for this study.

We know that instructors of research and statistics courses often encounter students with high levels of statistics anxiety upon their arrival to class (Perney & Ravid, 1991). According to Onwuegbuzie, Slate, Paterson, Watson, and Schwartz (2000), 75% to 80% of graduate students in the social sciences appeared to experience high levels of statistics anxiety. Statistics anxiety was found to be higher among female and minority graduate students in comparison to their male and Caucasian counterparts (Onwuegbuzie, 1999; Zeidner, 1991).

Researchers identified three categories of variables—situational, dispositional, and environmental—that are related to statistics anxiety (Onwuegbuzie & Wilson, 2003). Situational antecedents are factors that surround the student, including previous statistics experiences (Sutarso, 1992). Researchers found a negative connection between the number of completed mathematics courses and statistics anxiety (Auzmendi, 1991; Robert & Saxe, 1982; Zeidner, 1991). Forte (1995) found minimal previous math experience, late introduction to quantitative analysis, anti-quantitative bias, lack of appropriation for the significance of analytical models, and lack of mental imagery were factors contributing to statistics anxiety among social work students.

Dispositional antecedents are intrapersonal factors students bring to the classroom (Onwuegbuzie & Daly, 1999), which includes issues such as perfectionism and perception of abilities at developmental stages in life (Pan & Tang, 2004). Walsh and Ugumba-Agwunobi (2002) found evaluation concern, fear of failure, and perfectionism provoked statistics anxiety. Environmental antecedents are interpersonal factors related to the classroom experience (Onwuegbuzie & Daly, 1999), which can include the student's experiences with the professor. Tomazie and Katz (1988) reported previous experiences in statistics courses have influenced learning in a current course. Moreover, the environmental antecedent has the least research available in the literature.

## **Attitude Toward Statistics**

Attitude toward statistics is the second independent variable in this study. Attitude towards statistics is defined in this study as a combination of a students' attitude toward the use of statistics in their field of study and the students' attitudes towards the statistics course (Cashin & Elmore, 1997; Wise, 1985). Researchers explored this area; however, there are many gaps left to fulfill. Gal and Gingsburg (1994) reported students often enter statistics courses with negative views or later develop negative feelings regarding the subject matter of statistics. Researchers found no statistically significant differences

among females' and males' attitudes towards statistics (Araki & Schultz, 1995; Cashin & Elmore, 2005; Harvey, Plake, & Wise, 1985). However, conflictingly, Waters et al. (1988) and Roberts and Saxe (1982) found male students had more positive attitudes towards statistics than female students.

According to Perney and Ravid (1991), statistics courses are viewed by most college students as a road block to obtaining their degree. Students often delay taking their statistic courses until the end of their program. Researchers found students' negative attitudes toward statistics is an influencing factor in low student performance in statistics courses (Araki & Schultz, 1995; Elmore et al., 1993; Harvey et al., 1985; Schulz & Koshino, 1998; Robert & Saxe, 1982; Waters et al., 1988; Wise, 1985).

## Perceived Social Support

Perceived social support is the final independent variable in this study. Perceived social support for this study is defined as the level of support an individual self identifies as received from friends, family, and significant others (Zimet, Dahlem, Zimet, & Farley, 1988). This variable is influential in this study in terms of the potential buffering effect it may have on the other independent variables, statistics anxiety and attitude towards statistics.

According to Bonilla (1997), social support acts as a buffer to dysfunctional thoughts or attitudes. In 1985, Cohen and Wills investigated the process through which social support has a beneficial effect on well-being. The buffering model maintains that support is related to well-being primarily for persons under stress. Cohen and Wills identified four support resources, which include the following: (a) esteem support such as the person is valued and accepted, (b) informational support, (c) social companionship such as engaging in leisurely activities with others, and (d) instrumental support such as an individual providing a person with financial aid, material resources, or need-based services.

Solberg and Villarreal (1997) conducted a study to explore the interactions between social support and physical as well as psychological distress of Latino college students. The authors reported social support moderated the distress. Specifically, the Latino students who believed social support was available had lower psychological distress than students who believed that social support was less accessible.

## Research Questions

Six research questions were included in this study. The first four focus on descriptive information from our sample and include the following: (a) what is the graduate student self-efficacy level, (b) what is the graduate student statistics anxiety level, (c) what is the graduate student attitude toward statistics, and (d) what is the graduate student level of perceived social support? The predominate research question driving this study is, what is the extent of the relationship, if any, between graduate students' self-efficacy to learn statistics and statistics anxiety, attitude towards statistics, and social support? A supplemental research question was, what is the influence of social support on statistics anxiety and attitude towards statistics?

## Method

### Participants

Participants were recruited by the researcher emailing faculty members of doctoral and master's programs within colleges of education at 250 universities within the United States. The faculty members were asked to forward information about the opportunity to participate in the study to their students. One hundred sixty-six graduate students within colleges of education representing 27 states fully completed the online survey within the 8-week data collection timeframe. An a priori power analysis was conducted considering involvement of three predictors in the multiple regression equation and estimating a moderate effect size based on similar studies. It was determined that 119 participants are needed to achieve adequate power in the study (Faul, 2006); thus, an appropriate sample size was achieved to obtain adequate power in the analysis (Gall et al., 2007).

The sample was predominately female ( $N = 136$ , 81.9%) compared to males ( $N = 30$ , 18.1%). Participants' age ranged

from 21 to 71 with 34.4 as the mean age. The cultural makeup of the sample consisted of 4 Native American (2.4%), 4 Asian/Pacific Islander (2.4%), 24 African American (14.5%), 124 Caucasian (74.7%), and 10 Latino participants (6%).

The academic level of the participants was close to evenly split with 92 master's students (55.4%) and 74 doctoral students (44.5%). The majority of the sample ( $N = 144$ , 86.7%) were enrolled in counseling or related educational programs such as mental health counseling, school counseling, rehabilitation counseling, student affairs, and counselor education and supervision. Twenty-two (13.3%) participants were enrolled in education graduate programs such as educational leadership, curriculum and instruction, and educational technology. One hundred thirty-six participants (81.9%) were enrolled in programs that were accredited by at least one accreditation body appropriate to their program.

Participants had different backgrounds in terms of taking statistics courses. The mean number of completed graduate statistics classes at the time of participating in the study was 1.63 classes for the sample. The range of courses was 0 to 6, and the mode was 0 classes with 45 participants (27.1%) not having completed a single graduate level statistics course. Of the 121 who completed a statistics course previously, the mean final grade was 89.34% with the lowest grade earned reported as 70%.

### Instruments

A demographic questionnaire was used to collect information related to participants' personal characteristics as well as previous experiences with graduate statistics classes. The Self-Efficacy to Learn Statistics (SELS) scale was used to measure the dependent variable (Finney & Schraw, 2003). The SELS measures confidence in one's ability to learn necessary statistics while in a statistics course in order to successfully complete 14 specific tasks using a 1 (no confidence at all) to a 6 (complete confidence) response scale. Only a total score is obtained from the instrument. Internal consistency reliability was reported as .975 Cronbach's alpha. Validity evidence of SELS to other variables was reported. The SELS was positively correlated with the Math Self-Efficacy scale and negatively correlated to the general and statistics Test Anxiety Inventory subscale providing evidence of concurrent validity. The norm group for the instrument was a total of 154 college students enrolled in an introductory statistical methods course.

The Statistics Anxiety Rating Scale (STAR) was used to measure the independent variable statistics anxiety (Baloglu, 2002; Cruise & Wilkins, 1980). The assessment is a 51-item Likert scale ranging from 1 (no anxiety) to 5 (very much anxiety) and measures anxiety in two parts. The first part includes 23 statements related to statistics anxiety and the second part has 28 items related to dealing with statistics. A total score as well as six subscores including the following are generated with this instrument: Worth of Statistics, Interpretation Anxiety, Test and Class Anxiety, Computation Self-Concept, Fear of Asking for Help, and Fear of Statistics Teacher. Reliability for each of the subscales ranged between .68 to .94 with a median of .88 (Worth of Statistics .94, Interpretation Anxiety .87, Test and Class Anxiety .69, Computational Self-Concept .88, Fear of Asking for Help .89, and Fear of Statistics Teachers .80). Validity evidence of STARS to other variables was reported. The STARS had a strong correlation ( $r = .76$ ) to the Math Anxiety Scale (Roberts & Bilderback, 1980). The instrument was normed with 1,150 university students enrolled in statistics courses.

The independent variable, attitude toward statistics, was measured by the Attitude Toward Statistics (ATS) scale (Schultz & Koshino, 1998). This is a 29 item, 5-point Likert scale ranging from strongly disagree to strongly agree. A total score and two subscale scores, Attitudes Toward the Field and Attitudes Toward the Course, are obtained from the instrument. Both subscales were reported as reliable with Cronbach's alpha at .92 for Attitudes Toward the Field and .91 for Attitudes Toward the Course (Wise, 1985). The ATS was reported to have strong concurrent validity with the Statistics Attitude Survey. The norm group consisted of 162 university students enrolled in an introductory educational statistics course.

The third independent variable, social support, was measured by the Multidimensional Scale of Perceived Social Support (MSPSS) (Zimet, Powell, Farley, Werkman, & Berkoff, 1990). The instrument has 12 items and utilized a 7-point Likert scale ranging from very strongly disagree to very strongly agree. A total score and three subscale scores (support from significant others, support from family, and support from friends) were obtained. The instrument was reported as reliable with Cronbach's alpha coefficients reported as .85 to .91 for the three subscales. Test-retest values ranges from .72 to .85. Zimet et al. reported significant correlations between the MSPSS subscales and the Depression and Anxiety subscales of the Hopkins Symptom Checklist as evidence of construct validity for their instrument. The norm group consisted for 275 university students at Duke University.

## Data Analysis

A simultaneous multiple regression was analyzed to determine the extent of the relationship between graduate students' self-efficacy to learn statistics and statistics anxiety, attitude towards statistics, and social support. Alpha level was set at .05 for the analysis and semipartial correlation coefficients were assessed for practical significance. The multiple regression was repeated, removing social support from the analysis to explore any moderating effects of social support on the model.

## Results

Descriptive statistics of the sample data are displayed in Table 1 and sample scores for the assessments with a comparison to the maximum and minimum scores for the instruments are included in Table 2. Self-efficacy to learn statistics scores were normally distributed ( $SW(173) = .986, p = .076$ ) and the box plot for the criterion variable confirmed normality as well. Standardized residuals also were normally distributed ( $SW(173) = .988, p = .159$ ) and the box plot for the standardized residuals and scatterplots confirmed normality of the error variance or homoscedasticity. Scatterplots were analyzed for linearity, and it was determined no curvilinear relationships between the criterion variable and predictor variables were evident. Statistics anxiety and attitude towards statistics were highly correlated (-0.83), indicating multicollinearity.

**Table 1**

*Descriptive Statistics, Predictor Variable Correlations, Multiple Regression Results*

	<i>M</i>	<i>SD</i>	Self-Efficacy	Statistics Anxiety	Attitude Toward Stats	Social Support	B	<i>SE</i>	Beta	<i>t</i>	<i>p</i>
Self-Efficacy	49.73	18.97	1	-0.679	0.708	-0.023	-	-	-	-	-
Statistics Anxiety	119.95	35.83	-	1	-0.832	0.006	-0.15	0.051	-0.292	-3	0.003
Attitude Toward Stats	106.73	18.91	-	-	1	0.017	0.467	0.098	0.466	4.785	0.001
Social Support	5.69	1.04	-	-	-	1	-0.53	0.981	0.981	-0.54	0.593

**Table 2**

*Assessment Scores*

Scale	<i>M</i>	<i>SD</i>	Min	Max	Lowest Possible	Highest Possible
Statistics Self-Efficacy <sup>a</sup>	49.73	18.97	14	84	14	84
Statistics Anxiety <sup>b</sup>	119.95	35.83	56	201	51	255
Worth of Statistics <sup>c</sup>	32.2	12.68	16	75	16	80
Interpretation Anxiety <sup>c</sup>	26.99	9.31	11	53	11	55
Test and Class Anxiety <sup>b</sup>	24.48	8.12	8	40	8	40
Computation Self-Concept <sup>c</sup>	15.42	6.32	7	30	7	35
Fear of Asking for Help <sup>b</sup>	9.81	3.35	4	20	4	20
Fear of Statistics Teachers <sup>b</sup>	11.05	4.42	5	25	5	25
Attitude Toward Statistics <sup>d</sup>	106.73	18.91	38	143	29	145
Attitude Toward the Field <sup>d</sup>	78.4	11.96	29	100	20	100
Attitude Toward the Class <sup>d</sup>	28.33	8.79	9	45	9	45

Perceived Social Support <sup>c</sup>	5.69	1.04	1	7	1	7
Significant Other Support <sup>c</sup>	5.83	1.14	1	7	1	7
Family Support <sup>c</sup>	5.41	1.48	1	7	1	7
Friend Support <sup>c</sup>	5.67	1.03	1	7	1	7

<sup>a</sup>Lower scores indicate low self-efficacy.

<sup>b</sup>Lower scores indicate less reported anxiety.

<sup>c</sup>Lower scores indicate perceiving statistics as less useful.

<sup>d</sup>Lower scores indicate negative attitude.

<sup>e</sup>Lower scores indicate less support.

There was a statistically significant relationship between self-efficacy to learn statistics and statistics anxiety, attitude towards statistics, and social support:  $F(3, 162) = 60.489, p < .001$ . A moderate effect size was noted with 52.8% of the variance accounted for in the model,  $R^2 = .528$ . Statistics anxiety and attitude towards statistics were statistically significant predictors of self-efficacy to learn statistics and accounted for 3% and 7% of the variance, respectively. Social support was not a statistically significant predictor of self-efficacy to learn statistics and accounted for .1% of the variance. When social support was removed from the analysis, there was no change in statistical or practical significance.

## Discussion

This study sought to explore the relationships of graduate students' self-efficacy to learn statistics, statistical anxiety, attitudes towards statistics, and social support. The scores from the various instruments identifying each of the aforementioned variables produced both negative and positive correlations among each other. A statistically significant relationship was found among self-efficacy and statistical anxiety, attitudes towards statistics and social support indicating the importance of the graduate students' belief in their competence of facing the challenges of learning statistics. However, there was no change in the relationship when social support was removed from the analysis; thus, it was not a contributing variable. Statistics self-efficacy scores from participants indicated moderate responses which mirrored the prior studies involving undergraduate students (Pajares, 1996; Zimmerman, 2000). As this was the first study that investigated graduate students, these results create a path for future research.

There was a negative correlation between self-efficacy to learn statistics and statistical anxiety of the graduate students. The negative correlation is consistent with Onwuegbuzie's (2000) findings. Participants reported the lowest responses in the Fear of Asking for Help and Worth of Statistics subscales, signaling graduate students reluctance for asking for assistance from the professor and peers as well as a low belief in the applicability and purpose of statistics. Overall, these results and the negative correlation between self-efficacy and anxiety seem to depict a kind of self-fulfilling prophecy that graduate students assume when faced with taking statistics which is similar to Perney and Ravid's (1991) report.

A positive correlation was found between self-efficacy to learn statistics and attitudes towards statistics. This results indicated that the better the attitude of the graduate students towards statistics, the higher self-efficacy beliefs to learn the subject. Results indicated a more moderate response to attitudes not found in other studies where students were coming in with a negative attitude or were developing negative attitudes towards the end of the course (Gal & Gingsburg, 1994). It may be considered that graduate students in this study were neutral in their attitudes towards learning statistics without extreme reactions.

Participants reported a high level of social support, which indicates that most of the graduate students believed they had adequate support. The sample perceived social support as an influential factor in their lives, which is similar to most college student population reports (Solberg & Villarreal, 1997). However, social support was not a statistically significant predictor of self-efficacy to learn statistics. Also, when this variable was removed from the multiple regression analysis, there was no statistical or practical change in the regression. The insignificant result implies that social support was present for students, but it did not interact as a buffer between variables and possibly decrease anxiety or increase positive attitudes as indicated by Bonilla (1997), Cohen and McKay (1984), and Solberg and Villarreal (1997). Thus, social support may possibly help one cope but not necessarily remove the problem, change attitudes, or change thinking.

Multicollinearity between statistics anxiety and attitude toward statistics suggests an interrelationship between the two variables (Gall et al., 2007). Both variables may be measuring the relatively same characteristic; thus, neither variable may have brought something completely new to the analysis. It is interesting to note that statistics anxiety and attitude toward statistics as measured by the instruments in this particular study may be focusing on the same phenomenon.

## **Significance**

There were multiple benefits of this study. First, this study contributed to counselor education and student support services by increasing our knowledge of self-efficacy to learn statistics as experienced by graduate students. It also is significant because it documented students' experiences, which may act as a spring board for (a) future research, (b) implementing support interventions to increase statistics self-efficacy or success in statistics courses, and (c) helping students prepare for intrapersonal challenges that might impact their success in statistics. Each of these improvements are beneficial because they may increase graduate student self-efficacy and success in statistics courses as well as increase the incorporation of statistics into professional work after graduation.

## **Recommendations for Counselor Educators**

Decreasing anxiety among graduate students is vital to developing high levels of self-efficacy towards statistics. Implementing numerous opportunities for students to engage in research throughout their graduate studies allows for opportunities to be exposed to statistics, thus increasing students' confidence when faced with taking a statistics course. Also, inserting research and statistics into the curriculum of every graduate course exposes graduate students to the terminology and the function statistics play in their development as professionals. Possible ways to decrease statistical anxiety are through language and experience. Allowing graduate students to learn what is being said in a statistics course through weekly vocabulary tests can be one example of decreasing their anxiety. Also, getting the students involved with their own research throughout their course of study will help in promoting statistics mastery.

Improving attitudes towards statistics can help graduate students reframe their negative views towards the course. Helping graduate students to choose a positive view, explore origins or core of negative attitudes, and to appreciate the usefulness of statistics in their profession are good starting points for developing salient attitudes towards the subject. Counselor educators in a position to help graduate students confront negative attitudes, model positive attitudes and enthusiasm for statistics, and place a high value on statistics through verbal support and high expectations of research and statistics for students in graduate programs. The professor teaching statistics can play a key role in positively impacting their students' attitude toward the subject. Injecting humor, displaying empathy, providing a safe space for students to talk about their challenges, and celebrating their small successes can be tools in combating negative attitudes. Anecdotal stories of statistics professors engaging in statistical rap songs have been reported to successfully alleviate attitudes towards the subject as well as provide a positive environment to engage in learning.

## **Limitations of the Study**

There were limitations to this study. For instance, graduate students in counseling and education related programs were recruited for the study; thus, due to the general nature of the population, there were a disproportionate number of females and Caucasian students in the sample. As a result, a diverse sample was not obtained. However, a representative sample was acquired. Also, there were four scales for participants to answer in the study, therefore putting a time constraint burden on students to finish the instruments. Finally, these instruments were self-reporting, which can promote bias in how the graduate students answered (Gall et al., 2007).

## **Suggestions for Future Research**

Future research should expand investigations into statistics self-efficacy predictor variables that include number of statistics courses taken, previous statistics experience, and broad demographics of graduate students to include more participants representing the various races and ethnicities, marital status, and life experiences. Longitudinal studies to monitor how statistics self-efficacy changes for graduate students over time would provide a snapshot of the development

of attitudes throughout their graduate study tenure. Experimental designs to assess classroom and counseling based intervention effectiveness in reducing anxiety and improving attitudes should be conducted to improve the reliability of students learning statistics and influence the participation of conducting their own research for the betterment of the counseling profession. Finally, qualitative studies need to be conducted to better capture students' experiences in statistics classes.

## Conclusion

Researching predictors of graduate students' statistical self-efficacy beliefs is important to identifying possible barriers to professional growth and development. Exploring how statistical self-efficacy beliefs relate to predicting future academic expectations, performance, effort, persistence, and course selection (Pajares, 1996; Zimmerman, 2000) also is important to explore as a means of promoting professional development (Lent et al., 1984, 1986).

Graduate students who believed they were incapable of achieving success in a statistics course demonstrated higher levels of anxiety (Onwuegbuzie, 2000). This anxiety was pervasive among the 75% to 80% of graduate students in the social sciences profession in previous research studies (Onwuegbuzie et al., 2000), as well as to the 53% of the graduate students in this study. Additionally, graduate students hold off from taking a statistics course due to their negative attitudes towards the subject matter (Gal & Gingsburg, 1994). Teaching graduate students how to reduce their anxiety and improve their attitude will likely enhance their value of statistics and further encourage their professional development in the counseling profession.

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# Revitalizing Educational Counseling: How Career Theory Can Inform a Forgotten Practice



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**Educational counseling has declined as a counseling specialization in the United States, although the need for this intervention persists and is being met by other providers. This article illustrates how career theories such as Holland's RIASEC theory can inform a revitalized educational counseling practice in secondary and postsecondary settings. The theory suggests that six personality types—Realistic, Investigative, Artistic, Social, Enterprising, and Conventional—have varying relationships with one another and that they can be associated to the same six environmental areas to assess educational and vocational adjustment. Although educational counseling can be viewed as distinctive from mental health counseling and/or career counseling, modern career theories can inform the practice of educational counseling for the benefit of students and schools.**

*Keywords:* educational counseling, career theory, Holland, secondary education, postsecondary education

In searching for a formal definition of educational counseling, we found only one in the *APA Dictionary of Psychology* (VandenBos, 2007):

The counseling specialty concerned with providing advice and assistance to students in the development of their educational plans, choice of appropriate courses, and choice of college or technical school. Counseling may also be applied to improve study skills or provide assistance with school-related problems that interfere with performance, for example, learning disabilities. Educational counseling is closely associated with vocational counseling because of the relationship between educational training and occupational choice. (p. 314)

The *Counseling Dictionary* (Gladding, 2006) does not mention the term “educational counseling” in the following definition of counseling.

The application of mental health, psychological or human development principles, through cognitive, affective, behavioral or systemic interventions, strategies that address wellness, personal growth, or career development, as well as pathology. (Gladding, 2006, p. 37)

A renewed focus on educational counseling may be underway. The American Counseling Association meeting in Pittsburgh in 2010 brought together delegates from 29 major counseling organizations who agreed for the first time on a common definition of counseling. Educational goals were explicitly included in this definition: “Counseling is a professional relationship that empowers diverse individuals, families and groups to accomplish mental health, wellness, education, and career goals” (*Breaking News*, May 7, 2010).

The purpose of this article is to describe five functions essential for educational counseling (Hutson, 1958) and to use them to illustrate how Holland's RIASEC theory might inform this counseling practice: (a) choosing a college or school for postsecondary training, (b) selecting an academic program or major, (c) adjusting to the college or academic program, (d) assessing academic performance, and (e) connecting education, career, and life decisions.

## Historical Perspective

In tracing what has happened to educational counseling, a brief historical review can be helpful. In the early days of the vocational guidance movement, Brewer (1932) shifted the focus of guidance from vocation and occupation to education and

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instruction. He went so far as to institutionalize guidance as a professional field by linking the terms education and guidance and even using them synonymously. This could have elevated educational counseling to a more prominent position in the profession, but that did not happen. Brewer and others viewed guidance as limited by the descriptive adjective “vocational” with an emphasis on occupational choice (Shertzer & Stone, 1976), and this resulted in an estrangement between vocational and educational counseling.

Shertzer and Stone (1976) reported that the term “educational guidance” was first used in a doctoral dissertation by Truman L. Kelley at Teachers College, Columbia University, in 1914, and that he used it to describe the help given to students who had questions about choice of studies and school adjustment. Stephens (1970) pointed out that the shift from vocational choice to “guidance as education” ruptured the basic nature of the vocational guidance movement, separating the focus on “vocation” to “education.” Thus, vocational theory became associated with occupational choice and only tangentially related to educational choice, and we view this as leading to the separation of educational guidance and counseling from career theory.

In a comprehensive review of educational guidance literature published from 1933–1956, Hutson (1958) saw the counseling element of the educational guidance program as its most important function. He devoted a chapter to “Counseling for Some Common Problems” in which he identified 10 discrete but overlapping counseling situations. Several elements focused on educational counseling, including choice of subjects and curriculums, college-going (choice of going to college or working; choice of a particular college), and length of stay in school. Each of these problem areas involved counseling related to student psychological and educational characteristics, goals, and decision-making skills. Of relevance to this article, Hutson identified no theory related to educational counseling and cited only the vocational theory of Eli Ginzberg (Ginzberg, Ginsburg, Axelrad, & Herma, 1946) as informing vocational counseling. Theory-based educational counseling had not yet arrived.

The practice of educational counseling has faded from view in contemporary guidance and counseling literature. We conducted a search of journal titles and abstracts within the social sciences area using the term “educational counseling” and our university’s online library database system using Cambridge Scientific Abstracts (CSA) and PsychInfo. We were interested in how many “hits” for the past 10 years we would find in the following journals: *Career Development Quarterly*, *Journal of Career Assessment*, *Journal of College Counseling*, *Journal of College Student Development*, *Journal of Counseling & Development*, and *Journal of Counseling Psychology*. The search provided a total of seven results with only four falling into one of these six journals.

## Advising, Coaching, Brokering

While the field of educational counseling seems to have been in decline for the past 50 years, other specialties have emerged to take its place, including academic advising, academic coaching, and educational brokering.

The field of academic advising has been very active in the past 30 years. Ender, Winston, and Miller (1984) defined developmental academic advising as “a systematic process based on a close student-advisor relationship intended to aid students in achieving educational, career, and personal goals through the utilization of the full range of institutional and community resources” (p. 19). Later, Creamer (2000) defined it as “an educational activity that depends on valid explanations of complex student behaviors and institutional conditions to assist college students in making and executing educational and life plans” (p. 18). While generally careful to distinguish between the terms advising and counseling, the National Academic Advising Association (NACADA; <http://www.nacada.ksu.edu/index.htm>) has fully embraced most of the educational planning and adjustment issues faced by postsecondary students that heretofore might have been included in the domain of educational counseling.

It is beyond the scope of this article to fully explore the notion of academic coaching, so we will limit our comments to the general field of life and career coaching (Chung & Gfroerer, 2003; Patterson, 2008). In general, proponents view coaching as a service focused on a student’s future goals and the creation of a new life path based on less formal collegial mentoring relationships and a positive, preventive wellness model. Opponents view coaching as practicing counseling

without proper training or certification because there are limited professional standards or requirements in the coaching field.

Finally, the educational brokering movement in the 1970s was focused on helping adult learners navigate their way through postsecondary educational experiences (Heffernan, 1981). The educational broker independently assisted learners in the process of exploring, researching, and deciding on educational alternatives available. Some educational brokering proponents (Heffernan, 1981) held the view that an educational counselor employed by a specific institution would be biased and “guide” prospective students into the academic programs offered by the employing organization. Brokers were seen as neutral guides to the full range of educational options available to postsecondary learners.

## Modern Career Theories

In this article, we examine the topic of educational counseling and suggest that modern career theories could contribute to a revitalization of this function. These theories, identified and described by Brown (2002), include career contextualist theory (Young, Valach, & Collin, 2002); Gottfredson’s theory of circumscription, compromise, and self-creation (L. Gottfredson, (2002); cognitive information processing theory (Sampson, Reardon, Peterson & Lenz, 2004); life stage/ life space theory (Super, Savickas, & Super, 1996); narrative construction theory (Savickas, 2002); person-environment correspondence theory (Dawis, 2002); RIASEC theory (Holland, 1997); and social cognitive career theory (Lent, Brown, & Hackett, 2002). We illustrate our idea of how career theory might be useful in educational guidance and counseling programs using Holland’s (1997) RIASEC theory, emphasizing the environmental aspect of the theory.

Thus far, we have identified the function of educational counseling as an early component of the developing field of guidance and counseling, and we have outlined trends that have negated that function more recently. The irony is that the need for educational counseling services remains strong today, but it needs revitalization. We believe that the application of new theory, especially career theory, would be useful in that process and inform practice and research in the field. In this article, we focus on Holland’s RIASEC theory as one theory for accomplishing this revitalization. At the same time, we draw upon some of the basic functions of educational counseling drawn from the literature (Hutson, 1958; VandenBos, 2007).

## Holland’s RIASEC Theory

Holland’s theory and the related tools such as the Self-Directed Search (SDS; Holland, 1994) have become familiar icons in the career counseling field. Since the introduction of the SDS in 1972 and its use with over 29 million people worldwide (Psychological Assessment Resources, 2009), its incorporation into the Strong Interest Inventory (Harmon, Hansen, Borgen, & Hammer, 1994) and many other tools, we believe that most counselors feel comfortable and knowledgeable about this system. However, we also believe that the widespread familiarity with the hexagon and SDS is based on incomplete and outdated understandings of Holland’s contributions. For many, the theory is viewed as a simple matching model of three personality types, e.g., the three-letter SDS summary code, and the codes of occupations taken from some source, e.g., O\*Net (<http://online.onetcenter.org/>), *Occupations Finder* (Holland, 2000).

One reason for the partial understanding of Holland’s theory and applications may be the result of the massive volume of research and literature that has been produced since 1957. Authors (2008) reported 1,609 reference citations from 1953–2007 in 197 different journals which make it extremely difficult to fully understand and utilize this body of work. Moreover, many articles have appeared in education journals not often read by counselors, e.g., *Journal of Higher Education*, *Research in Higher Education*, *Higher Education*, and the *Review of Higher Education*. It is no small irony that Holland’s early work was undertaken in educational settings examining students undecided about their major, adjustment to college, the nature of academic environments, and the work of the faculty within disciplines. Smart, Feldman, and Ethington (2000) recognized this gap in applying Holland’s work to higher education, and their research collaborators have published over 20 articles seeking to address it.

This article focuses on how college students struggle with varied educational decisions, e.g., undecided about their college major, and then examines the ways in which Holland’s RIASEC theory might be used in educational interventions.

We begin with a review of Holland's theory with respect to personality and environment, and then describe several practical tools based on the theory that might be used in educational counseling.

## Personality

Holland's typological theory (Holland, 1997) specifies a theoretical connection between personality and environment that makes it possible to use the same RIASEC classification system for both. Many inventories and career assessment tools use the typology to enable individuals to categorize their interests and personal characteristics in terms of combinations of the six types: Realistic (R), Investigative (I), Artistic (A), Social (S), Enterprising (E), or Conventional (C). These six types are briefly defined in relation to educational options in Table 1.

**Table 1**

*Sample of Holland Types Related to Educational Fields*

Type	Examples of Fields	Typical Traits
Realistic	computer engineering, forestry, surveying, poultry science, mining technology, computer installation, heating/AC technician, animal training, pharmacy technician, massage, meat cutter, carpentry, turf management, furniture design	mechanical and athletic abilities, likes to work outdoors and with tools and machines; might be described as conforming, frank, hardheaded, honest, humble, materialistic, natural, normal, persistent, practical, shy, thrifty
Investigative	biology, chemistry, physics, geology, anthropology, laboratory assistant, medical technician, social psychology, computer science, pharmacy, criminology, geography, general studies, liberal arts, psychology	math and science abilities, likes to work alone and to solve problems; might be described as analytical, complex, critical, curious, independent, intellectual, introverted, pessimistic, precise, rational
Artistic	composer, music, stage director, dance, interior decoration, acting, writing, drawing, languages, painting, speech, philosophy, comparative literature, industrial design, landscape architecture, historic preservation, housing studies, journalism	artistic skills, enjoys creating original work, has a good imagination; may be described as complicated, disorderly, emotional, idealistic, imaginative, impulsive, independent, introspective, nonconforming, original
Social	education, speech therapy, counseling, clinical psychology, nursing, dental hygiene, sports medicine, ministry/theology, music therapy, special education, home health, food and nutrition	likes to help, teach, and counsel people; may be described as cooperative, friendly, generous, helpful, idealistic, kind, responsible, sympathetic, tactful, understanding, warm
Enterprising	marketing, television production, business, sales, hospitality management, sports administration, urban planning, acting/directing, advertising, entrepreneurship, educational administration, financial planning, pre-law, insurance, political science, real estate	leadership and public speaking abilities, is interested in money and politics, likes to influence people; described as acquisitive, agreeable, ambitious, attention getting, domineering, energetic, extroverted, impulsive, optimistic, self-confident, sociable
Conventional	bookkeeping, accounting, office management, court reporting, desktop publishing, medical laboratory assisting, computer operator, hematology technology, business communications	clerical and math abilities, likes to work indoors and to organize things; described as conforming, careful, efficient, obedient, orderly, persistent, practical, thrifty, unimaginative

According to RIASEC theory, if a person and an environment have the same or similar codes, e.g., an Investigative person in an Investigative environment, then the person will likely be satisfied and persist in that environment (Holland, 1997). This satisfaction will result from individuals being able to express their personality in an environment that is supportive and includes other persons who have the same or similar personality traits. It should be noted that neither people nor environments are exclusively one type, but rather combinations of all six types. Their dominant type is an approximation of an ideal, modal type.

The profile of the six types can be described in terms of a number of secondary constructs, e.g., the degree of differentiation (flat or uneven profile), consistency (level of similarity of interests or characteristics on the RIASEC hexagon for the first two letters of a three-letter Holland code), or identity (stability characteristics of the type). Each of these factors moderates predictions about the behavior related to the congruence level between a person and an environment. These secondary constructs provide an in-depth schema for understanding a person's SDS results with diagnostic implications regarding the amount of counselor involvement and skill that may be needed for an intervention (Reardon & Lenz, 1999). Given extended discussion of these ideas in other literature (Reardon & Lenz, 1998), we will not focus on them here but concentrate our attention on the environmental aspects of RIASEC theory in education.

## Environments

While the personality aspects of Holland's theory are widely known, the environmental aspects—especially of college campuses, fields of study, and work positions—are less well understood and appreciated (Gottfredson & Holland, 1996). Holland's early efforts with the National Merit Scholarship Corporation (NMSC) and the American College Testing Program enabled him to look at colleges and academic disciplines as environments. It is important to note that RIASEC theory had its roots in higher education and later focused on occupations.

Gottfredson and Richards (1999) traced the history of Holland's efforts to classify educational and occupational environments. Holland initially studied the numbers of incumbents in a particular environment to classify occupations or colleges in terms of RIASEC categories, but he later moved to study the characteristics of the environment independent of the persons in it. College catalogs and descriptions of academic disciplines were among the public records used to study institutional environments. Astin and Holland (1961) developed the Environmental Assessment Technique (EAT) while at the NMSC as a method for measuring college RIASEC environments.

Smart et al. (2000) presented evidence concerning the way academic departments socialize students. They reported that “faculty members in different clusters of academic disciplines create distinctly different academic environments as a consequence of their preference for alternative goals for undergraduate education, their emphasis on alternative teaching goals and student competencies in their respective classes, and their reliance on different approaches to classroom instruction and ways of interacting with students inside and outside their classes” (p. 238). Furthermore, these environments “have a strong socializing influence on change and the stability of students' abilities and interests—that is, what students do and do not learn or acquire as a consequence of their collegiate experiences” (p. 238). Smart et al. noted that faculty in Investigative, Artistic, Social, and Enterprising disciplines create academic environments in a manner consistent with Holland's theory, and “the degree to which academic environments are ‘successful’ in their efforts to socialize students to their respective patterns of abilities and interests thus appears to differ considerably, with Artistic and Investigative environments being the most ‘successful’ and the Social and Enterprising environments being less ‘successful’” (p. 146).

These findings suggest that students might best view academic programs in terms of the IASE schema and focus on the kinds of abilities and interests they wish to develop while in college. Such understandings and goal setting could be explored in educational counseling.

Finally, Tracey and Darcy (2002) reported that college students without an intuitive RIASEC schema for organizing information about interests and occupations experience greater career indecision. This finding suggests that the RIASEC hexagon may have a normative benefit regarding the classification of occupations and fields of study. There is increasing evidence that a RIASEC cognitive structure is associated with positive career decision variables (Tracey, 2008). Persons adhering to this structure had stronger career certainty, interest-occupation congruence, and career decision-making self-

efficacy at the beginning of a career course than those not using the RIASEC structure. Moreover, teaching this structure in a career course led to increased certainty, congruence, and self-efficacy at the end of the course for those adhering to the model.

## Using RIASEC Theory in Educational Counseling

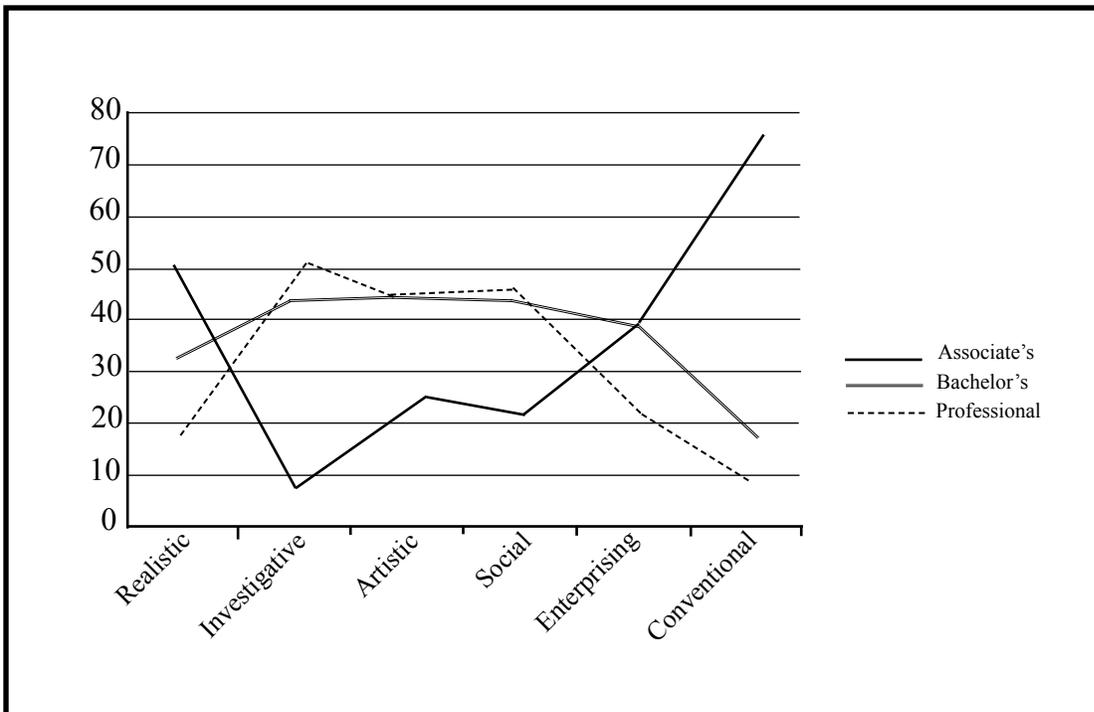
In this section, we discuss the five basic educational counseling functions identified by Hutson (1958), and how Holland's RIASEC theory might inform this practice. To address these five problems in educational counseling from a RIASEC perspective, it would be important for the counselor to have a basic understanding of Holland's theory (Holland, 1997). The client might complete the Self-Directed Search (Holland, 1994) and review the *Occupations Finder* (Holland, 2000), *Educational Opportunities Finder* (Rosen, Holmberg, & Holland, 1997), and *You and Your Career* (Holland, 1994) booklets. These materials operationalize and explain the theory in client terms. Armed with this basic information and these tools, the counselor and client can enter into a collaborative relationship to resolve educational problems and make educational decisions.

## Choosing a College or School

The number of options for education and training is very large. Choices Planner (Bridges, 2009) was examined for one state and 196 postsecondary schools offering associate, bachelors, and professional (postgraduate) degrees were found. The Choices system makes it possible to use varied criteria for selecting among these options, including five school types, (e.g., public, private), specific miles from a designated ZIP postal code, six regions of the state, five campus or town settings of the school, eight tuition ranges, five affiliations (e.g., women, religious), on-campus housing, and over 30 sports options for men or women. If the student wanted to explore options in additional states the number of options would grow exponentially.

The array of postsecondary schools has very limited options for Realistic and Conventional types, which led Smart et al. (2000) to exclude these areas from their study of baccalaureate level colleges and universities. College level occupations are least frequently associated with the Conventional and Realistic categories, while Investigative and Artistic work are most likely associated with college level employment or the highest level of cognitive ability. Smart et al. found few college majors, faculty, or students in their samples categorized as Realistic or Conventional.

Taking this a step further, the number of associate, bachelors, and professional academic programs listed in the *Educational Opportunities Finder* (EOF; Rosen et al., 1997) were tabulated in relation to RIASEC categories. Of the 750 postsecondary programs of study listed in the EOF, there were 296 offered at the associate level, 492 at the bachelor's level, and 645 at the professional level. Because some programs are offered at more than one degree level, the resulting total degree programs listed in the EOF number 1,517. Inspection of Figure 1 shows proportionally more Realistic and Conventional programs are available at the associate degree level in comparison to the other two degrees. Conversely, more professional degrees are offered in the IAS categories. This suggests that vocational technical schools and community colleges would be the types of schools most likely offering programs in these two areas. In this way, RIASEC theory could be used to guide selection of a school.



**Figure 1.** Percent of three postsecondary degree levels in RIASEC Categories. Data obtained from the *Educational Opportunities Finder* (Rosen, Holmberg, & Holland, 1997).

Authors (1996) documented this phenomenon in their research and reported that the student body at their postsecondary institution was composed predominately of S, E, and I types, creating an SEI-type school. They reported 153 fields of study at the university enrolled 10,439 students with declared majors in the following categories: R, 5%; I, 19%; A, 13%; S, 34%; E, 19%; and C, 10%. This suggests a student body with a profile of SEIACR. Such a student population would find C and R types in a minority.

RIASEC theory can inform the process of choosing a college by providing a conceptual schema of six environments and judging the priority and influence of each in socializing enrolled students. Students with E-type personalities (e.g., interests and skills) might have the best fit in a school that reinforced and prized those traits, and the same would be true for the remaining RIASEC environments. In the following sections we will explain more how the environmental aspect of RIASEC theory may be used in educational counseling.

### Selecting an Academic Program or Major

The Choices Planner (Bridges, 2009) lists over 780 specific academic programs or fields of study (majors) for students for the selected state. Large universities may have several hundred undergraduate majors and this can be overwhelming to students required to pick one field. Holland's RIASEC schema can help to make the process of exploring and selecting options less daunting. This section describes some ways this might happen.

First, when students understand the basic elements of RIASEC theory they are armed with a schema for categorizing a great amount of academic information. Table 1 illustrates the operation of this schema in

practical terms. Students intent on pursuing a bachelor's degree can be informed that most college fields of study or disciplines are concentrated in Holland's Investigative, Artistic, Social, and Enterprising areas (Smart et al., 2000), which reduces hundreds of options to four areas.

Second, the research by Smart et al. (2000) of bachelor's programs was based on the idea that "faculty create academic environments inclined to require, reinforce, and reward the distinctive patterns of abilities and interests of students in a manner consistent with Holland's theory" (p. 96). Moreover, "students are not passive participants in the search for academic majors and careers; rather, they actively search for and select academic environments that encourage them to develop further their characteristic interests and abilities and to enter (and be successful in) their chosen career fields" (p. 52). This is an important idea because it puts the power of informed choice in the hands of students as they explore educational options. They can actively select the type of environment in which they desire to spend their time and in which they wish to learn while in college.

Third, Smart et al. (2000) described primary and secondary recruits entering bachelor's level academic programs. Primary recruits were freshmen entering disciplines directly from secondary school (discussed in this section) and secondary recruits (discussed in the next section) were those who changed their minds after entering college. Based on their research, Smart et al. found that two-thirds of freshmen (primary recruits) initially selected majors in the Social area and remained in that area over four years, while only slightly more than half of the students in the Enterprising area persisted in that area over four years. Students in the Artistic and Investigative areas both persisted over four years at 64%. Overall, about two-thirds of freshmen (primary recruits) persisted in one of the four disciplines initially selected and about 30% changed to another area.

The information gleaned from research by Smart and his colleagues of bachelor's level programs can help inoculate students for relief of some of the anxiety regarding the selection of an academic program. Rather than simply focusing on the occupations related to a major in making a choice, students can focus on the nature and characteristics of the IASE environments and prioritize them according to their goals, interests, values, and skills. These understandings would also help students search for information about academic programs that provide details about whether or not the way life in the program is consistent or inconsistent with the theoretical RIASEC environment characteristics, e.g., student relationships with professors, classroom activities, nature of learning projects, leadership styles favored.

## **Adjusting to the College or Academic Program**

Faculty in IASE disciplines create specialized academic environments that are shared by the students selecting these majors. The variability in the socialization styles and the effects of the environments on student behaviors and thinking were described by Smart et al. (2000) and are summarized below. Increased understanding of these environmental characteristics is important in educational counseling and for student decisions about preferred fields of study.

Faculty in Investigative environments place primary attention on developing analytical, mathematical, and scientific competencies, with little attention given to character and career development. They rely more than other faculty on formal and structured teaching and learning, they are subject-matter centered, and they have specific course requirements. They focus on examinations and grades. This environment has the highest percentage of primary recruits (e.g., students select it as freshmen).

Faculty in Artistic environments focus on aesthetics and with an emphasis on emotions, sensations, and the mind. The curriculum stresses learning about literature and the arts, as well as becoming a creative thinker. Faculty also emphasize character development, along with student freedom and independence in learning.

Varied instructional strategies are used in these disciplines.

Faculty in Social environments have a strong community orientation characterized by friendliness and warmth. Like the Artistic environment, faculty place value on developing a historical perspective of the field and an emphasis on student values and character development. Unlike the Artistic environment, faculty also place value on humanitarian, teaching, and interpersonal competencies. Collegueship and student independence and freedom are supported, and informal small group teaching is employed.

The Enterprising environment has a strong orientation to career preparation and status acquisition. Faculty focus on leadership development, the development and use of social power to attain career goals, and striving for common indicators of organizational and career success. Teaching strategies in this environment are very balanced, but faculty like most to work with career-oriented students regarding specialized issues related to organizational and individual achievement.

Once an academic program is selected as a major field of study and the student begins to interact with other students and faculty in the program, more information of a personal nature is acquired which can lead to adjustments that the student will need to make to excel in that environment. For example, when Smart et al. (2000) examined college environments (the percentage of seniors in each of the IASE areas), they found that from 30–50% of the four environments were composed of primary recruits and about half were secondary recruits, e.g., the seniors who had changed their majors. This means that almost half the seniors ended up in an IASE discipline that was different from their initial choice.

Students migrated to and from the four environments in different ways. For example, two-thirds of the seniors in the Artistic environment were secondary recruits from one of the other areas; they did not intend to major in the Artistic area in their freshman year. In addition, about one third of the students migrating into the Social area came from Investigative, Enterprising, or undecided areas. Stated another way, the Social environments appear to be the most accepting and least demanding of the four environments studied by Smart et al. (2000) and Social disciplines seem to have the least impact and the least gains in related interests and abilities. Students moving into the Investigative area were most likely to come from the Enterprising area, and vice versa.

These findings (Smart et al., 2000) reveal the fluid nature of students' major selections and the heterogeneous nature of the four environments with respect to the students' initial major preferences. They also provide information regarding the migration of students among the IASE disciplines, and this can inform educational planning for students and counselors about the way in which these four disciplines interact with different types of students.

In summary, Smart et al. (2000) found that congruent students in Investigative, Artistic, and Enterprising environments increased their pattern of self-reported interests and abilities over four years by further developing what was already present in their personality. These three environments also increased the related traits for incongruent students, but the gap between the congruent and incongruent students did not decrease over time. In other words, students in both congruent and incongruent environments made equivalent or parallel changes in self-reported abilities and interests over four years, but students in congruent environments had higher levels of interests and abilities at the end of four years. Investigative and Enterprising environments had the most impact on student characteristics. These findings, if communicated to students in educational counseling, could affect the nature of discussions about students' educational goals in college.

## **Assessing Academic Performance**

Early in his career, Holland (1957) began to discuss the impact of college on students and how varied personality traits and beliefs other than aptitude were associated with success. Gottfredson (1999) noted that Holland's early research demonstrated that much of the output from the college experience was related to what students brought into that experience. According to Gottfredson, Holland promoted the idea that college selection practices relying heavily on measures of academic potential resulted in much lost talent, e.g., selection of the top 10% of high school students based only on grades would exclude about 86% of high school class presidents (Enterprising types). The idea that noncognitive traits (e.g., RIASEC personality types) would be important in assessing academic performance is a noteworthy contribution of Holland's theorizing and research.

Academic success is sometimes measured in terms of persistence on the part of the student or retention on the part of the institution. Other immediate outcome measures might include the grade point average, student satisfaction, awards received, or engagement in program activities, while longer term outcomes might include professional accomplishments, contributions, and recognitions. It should be noted that while all academic programs require cognitive skill and ability, some programs further emphasize interests and abilities related to the RIASEC areas identified in Table 1. These could include creativity, leadership, community service, and the like.

According to RIASEC theory, students in an environment that is highly congruent or matches with their personality will persist in that environment and achieve awards and recognition from the environment. In the process of educational counseling, students should have opportunities to clarify what it means to be in, or move to or out of, an environment that either matches their type or provides an opportunity to develop desired skills and interests. Their achievements and satisfaction would theoretically be related to the quality of the match between their personality and the environmental characteristics.

## **Connecting Education to Career and Life**

Holland's RIASEC theory provides a relatively simple, effective scheme for thinking about people (e.g., personalities, traits, interests, values, behaviors, attitudes) and their options (e.g., educational programs, occupations, work organizations, leisure activities). Conceptualizing people and options in these six areas can improve personal and career decision making.

Several examples of this strategy are apparent. For example, when students conduct information interviews they might structure questions and make observations about the degree to which the various RIASEC codes are prevalent in the life of the interviewee or characterize the organizational setting. In considering job offers, students might use the RIASEC schema to assess the quality of the fit between their personality and the culture of the organization, or more particularly, the personality of their immediate supervisor.

The UMaps project at the University of Maryland is a good example of applying RIASEC theory to life/career options (Jacoby, Rue, & Allen, 1984). The UMaps program operated out of the Office of Commuter Affairs in the Division of Student Affairs and was designed to help students become aware of diverse campus opportunities, options, and resources related to RIASEC types. Using both large posters displayed on bulletin boards and brochures distributed by advisors, each of the six RIASEC UMaps had a standard layout including areas of study (with office locations and phone numbers), sample career possibilities, internship and volunteer options, and student organizations and activities related to each type. Each map also had a brief description of the RIASEC type and a brief self-assessment related to interests and skills.

As reported earlier, Reardon, Lenz, and Strausberger (1996) used an earlier version of the *Educational Opportunities Finder* (Rosen et al., 1997) to classify all of the majors at a large university, and then used these data to assess the types of students seeking services in the career center and to design appropriate interventions. For example, it was judged that Realistic and Investigative students might prefer independent career planning using a computer-assisted guidance system, e.g., Choices Planner, rather than an individual counseling session.

Descriptive information about college majors could include the kinds of information summarized by Smart et al. (2000) about course structures, learning style expectations, faculty interests and activities, and program objectives. Other student information materials could list volunteer experiences related to the discipline (if any), introductory classes, sample employment opportunities, and profiles of graduates. Brochures and other descriptive information used in academic advising and educational counseling could be indexed or include information about Holland codes. These examples illustrate the ways in which RIASEC theory applied in educational counseling might be extended to broader life and career decisions.

## Summary and Implications

This article illustrates how the educational counseling function has become estranged or lost in traditional counseling practice in secondary and postsecondary settings. While educational counseling can be viewed as distinctive from mental health counseling and/or career counseling, modern career theories can inform the practice of educational counseling for the benefit of students and schools. Holland's RIASEC career theory, especially the extensive research on educational environments conducted by Smart and his associates (2000) and reported in more than six different journals, was used to illustrate this idea.

Educational counselors using RIASEC theory need to be fully informed about the theory, the research that supports it, the instruments that are based upon it, and the counseling techniques that could be derived from it. Such theory-driven practice might represent a new paradigm in educational counseling. Holland's (1997) theory, like other career theories, has the most power when the extremes of wealth, social class, genetic traits, and health are not in effect. In other words, career theory probably works best in educational counseling for students in general rather than those at the extremes of any personal trait or situation.

RIASEC theory can be useful in educational counseling by specifying the kinds of conditions and traits associated with difficulties in educational decision making. Authors (1998, 1999) and Holland, Gottfredson, and Nafziger (1975) indicated that persons with poor diagnostic signs on the Self-Directed Search, e.g., lack of congruence between expressed and assessed summary codes, low differentiation, low consistency, low coherence among aspirations, low profile elevation, and a high point code in the Realistic or Conventional area, were likely candidates for more intensive counseling interventions. This is a special province of educational counselors because of their professional counselor training as opposed to the standard training for academic advisors or coaches. Students with high Artistic codes also may be problematic because of their preference for a non-rational approach to decision making (Holland et al., 1975). Persons with such diagnostic signs will likely need more time and professional, individualized counselor assistance in career problem solving and decision making.

Smart et al.'s (2000) research reveals some of the variations in academic departments and suggests implications for college and university organizational systems. It is important for counselors and other staff to inform students about the impact of majors and academic disciplines on the development of student interests and skills. At present, advisors make students aware of many aspects of a major, e.g., required courses, prerequisites, entrance requirements, and the occupations most closely aligned with the major. Providing additional information based on the research findings by Smart et al. regarding the way academic environments

socialize or affect students pursuing that major will make students better “consumers” of majors or “shoppers” of academic programs.

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# Psychosocial Prevention Education: A Comparison of Traditional vs. Thematic Prevention Programming for Youth



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**Group counseling has been highlighted as one effective intervention for at-risk students, yet debate remains as to the comparable efficacy of traditional interventions versus thematic interventions. This study compared two psychosocial educational programs, the PEGS and ARK Programs, designed to help elementary school students with social skills development, problem behaviors, bullying, and self-esteem with 15 elementary-aged students. Results revealed no differences between the programs and improvement on many indicators. Implications for school counselors are presented.**

*Keywords:* elementary students, psychosocial education, prevention programs, school counseling, traditional interventions, thematic interventions

Group work can be an effective means of counseling at-risk students. As such, the American School Counselors Association (ASCA) has endorsed group work as an important component of school counseling (ASCA, 2005). Groups can help students learn to solve problems in an efficient and effective manner and is an ideal method for meeting the needs of at-risk populations (Akos & Milsom, 2007). Group counseling allows students to develop connections while at the same time exploring factors that may affect their achievement (Kayler & Sherman, 2009). Groups are used to address such issues as social skills (Bostick & Anderson, 2009), bolstering students' self-perceptions (Eppler, Olsen, & Hidano 2009), preventing problem behavior (Todd, Campbell, Meyer, & Horner, 2008), increasing academic success (Brigman, Webb, & Campbell, 2007), and reducing school-wide bullying (Allen, 2010). Further, Quinn, Kavale, Mathur, Rutherford, and Forness (1999) conducted a meta-analysis (35 studies) of social skills interventions used with children exhibiting problem or emotional behaviors. Results revealed several important issues. First, it appears that there is a wide range of presenting deficits in children's social skills. Second, social skills training is widely used as a mechanism to address problem behavior in children; however, it may not be as effective at addressing problem behaviors when used in isolation. The purpose of this study is to compare the effectiveness of two psychosocial intervention programs, *Psychosocial Educational Groups for Students* (PEGS) and the *At-Risk Kids Groups* (ARK) and to assess the impact of each program. The PEGS and ARK Programs are designed to help elementary school students in the following areas: social skills development, problem behaviors, bullying, and self-esteem.

## Issues Addressed in Groups

According to Berry and O'Conner (2010), social skills are a set of learned behaviors that allow for positive social interactions, such as sharing, helping, initiating and sustaining relationships. Children who enter the academic setting with problem behaviors are often the children who lack the social skills to create and maintain positive social interactions. In

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a recent study by Bostick and Anderson (2009), 49 third graders with social skill deficits participated in a 10-week social skills program aimed at reducing loneliness and anxiety in an academic setting. Findings revealed significant reductions in loneliness and anxiety as well as significant increases in reading scores.

Groups also can be an effective manner in addressing children with problem behavior. For example, Hudley, Graham, and Taylor (2007) studied the level of children's aggression in relation to personal responsibility. After a series of 12 lessons related to detecting other's intentions, externalization, and positive responses, students showed improvement in socially acceptable behavior along with a reduction in overall aggression. For additional examples also see Cotugno (2009), McCurdy, Lannie, and Barnabus (2009), and Todd, Campbell, Meyers, and Horner (2008).

Olweus (1997) defines bullying as purposeful behavior, repeated over time, including an imbalance of power. Several psychoeducational programs have been developed to address the issue of bullying in schools (Horne, Bartolomucci, & Newman-Carlson, 2003; Jenson & Dieterich, 2007; Olweus, 1991). At-risk students are at particular risk for bully-related behaviors, including both roles of victim and perpetrator (Allen, 2010). Therefore, group intervention in the schools may be a beneficial way of directly addressing bullying.

Self-esteem, also known as self-concept, is often defined as the way in which children think about themselves in relation to their attributes and abilities (Kenny & McEachern, 2009). "Part of preventing problem behaviors is increasing the self-esteem of those with problem behaviors" (Newgent, Behrend, Lounsbury, Higgins, & Lo, 2010, p. 82). There are relatively few empirical studies, however, on the effectiveness of groups and self-esteem (e.g., O'Moore & Kirkham, 2001; Whitney & Smith, 1993).

## Prior Research

A paucity of research exists on addressing multiple presenting problems in children. A major implication of the Quinn et al. (1999) meta-analysis suggested that psychoeducational groups may need to address more than one problem. A study conducted by Newgent et al. (2010) examined the effectiveness of a 6-week psychosocial educational group for students that addressed social skills, problem behaviors, bullying, and self-esteem. Results showed that students with multiple presenting issues benefited from a group addressing multiple issues. Further, results showed that students with no clinically relevant presenting issues also benefited from the multi-issue group (Newgent et al., 2010). In addition, some research is suggesting that while traditional, process-oriented groups can be effective at addressing problems, thematic groups have become more prevalent, especially when there is a time constraint (Hartzler & Brownson, 2001). While the benefit of thematic groups is a more specific or more common goal it also can lack the breadth of more traditional groups.

This study aimed to compare the effectiveness of two selective intervention programs (traditional vs. thematic) on measures of social skills, problem behaviors, teacher- and self-reports of peer relationships (bullying behaviors and peer victimization), self-esteem (self-worth, ability, self-satisfaction, and self-respect) and perception of self. Further, this study aimed to assess the impact of each of the intervention programs. The following research questions were tested: Is there a differential impact when comparing the PEGS Program to the ARK Program? Do the PEGS and ARK Programs have a positive impact on social skills, problem behaviors, peer relationships, and self-esteem?

## Method

### Participants

Eleven ( $n = 11$ ) students were enrolled in the PEGS Program and four ( $n = 4$ ) students were enrolled in the ARK Program. No attrition of program participants occurred. While participation was open to all students, teachers only recommended male students for both programs. Students in the PEGS Program were in the 4th grade and students in the ARK Program were in the 5th grade. In the PEGS Program five students (45%) identified as Caucasian/White, four (36%) identified as African American, one (9%) identified as Hispanic, and one (9%) identified as other. In the ARK Program one student (25%) identified as Caucasian, one student (25%) identified as African American, and two students (50%) identified as Hispanic. No students were identified as having some type of diagnosed learning, behavioral, or emotional disability.

### Selective Intervention Program

One of the underlying tenants of the PEGS and ARK Programs is that students should not be labeled or stigmatized for

having problems. Therefore, both programs utilized referrals that were based on underlying characteristics that lead to specific problems, not labels. Thus, students who are impulsive, depressed, dominant, lonely, easily frustrated, anxious, lack empathy, have low self-esteem, have difficulty following rules, are socially withdrawn, view violence in a positive way, have few friends, make negative attributions, have mood swings, instigate conflict, have difficulty handling conflict, or are aggressive or stressed were identified by their teachers and recommended for one of the two programs.

While both the PEGS and the ARK Program cover the same underlying psychosocial educational content, the primary difference is that the PEGS Program consists of traditional psychosocial education units while the ARK Program units are targeted toward peer victimization (i.e., bullying). Both PEGS and ARK provide a series of 6 one-half hour group sessions over the course of 6 weeks for elementary school students in grades 3–5. The six psychosocial education components of each of the intervention programs include: (a) improving social skills, (b) building and increasing self-esteem, (c) developing problem-solving skills, (d) assertiveness training, (e) enhancing stress/coping skills, and (f) prevention of mental health problems/problem behaviors. Lessons for the PEGS Program were adapted from *Lively Lessons for Classroom Sessions* (Sartori, 2000), *More Lively Lessons for Classroom Sessions* (Sartori, 2004), and the *Missouri Comprehensive Guidance Programs* (Frankenbert, Grandelious, Keller, & Schaaf, n.d.). These lessons focused on cooperation, encouraging students to be proud of who they are, breaking the chain of violence, handling anxiety and stress, and tolerance regarding differences. Lessons for the ARK Program were adapted from *Bully Busters: A Teacher's Manual for Helping Bullies, Victims, and Bystanders* (Horne, Bartolomucci, & Newman-Carlson, 2003). These lessons focused on increasing awareness of bullying, building personal power, recognizing the bully and the victim, recommendations and interventions for helping victims, and relaxation and coping skills. Puppets were utilized in both programs to help model the lessons being taught. Worksheets related to the lessons also were utilized to help crystallize the concepts.

All recommended students participated in the one of the programs. Given class schedules, the school counselor recommended that students be assigned to one of the programs by grades. Therefore, all recommended 4th grade students were assigned to the PEGS Program and all recommended 5th grade students were assigned to the ARK Program. These assignments were done on a random basis. No control groups were utilized in this study at the school's request. The same facilitators were used for both programs.

## Instruments

**Social Skills Improvement System – Teacher Form (SSiS–T).** The Social Skills Improvement System – Teacher Form was developed by Gresham and Elliott (SSiS; 2008) and published by NCS Pearson, Inc. The SSiS–T is an 83-item rating scale designed specifically for teachers to use to assess children's school-related problem behaviors and competencies. Scores reported for each of the three measurement areas are percentiles. Clinical levels for each of the three areas are as follows: social skills ( $\leq 16$ ), problem behaviors ( $\geq 84$ ), and academic competence ( $\leq 16$ ). That is, lower scores on social skills and academic competence and higher scores on problem behaviors are considered clinically problematic. For the purposes of this study, only social skills and problem behaviors were evaluated. Cronbach alphas for social skills were .95 and .92 at pre- and post-test assessment, respectively. Cronbach alphas for problem behaviors were .86 and .89 at pre- and post-test follow-up assessment, respectively.

**Social Skills Improvement System – Student Form (SSiS–S).** The Social Skills Improvement System – Student Form was developed by Gresham and Elliott (SSiS; 2008) and published by NCS Pearson, Inc. The SSiS–S is a 75-item rating scale designed specifically for students aged 8–12 to use to assess their own school-related problem behaviors and competencies. Scores reported for each of the two measurement areas are percentiles. Clinical levels for each of the two areas are as follows: social skills ( $\leq 16$ ) and problem behaviors ( $\geq 84$ ). That is, lower scores on social skills and academic competence and higher scores on problem behaviors are considered clinically problematic. Cronbach alphas for social skills were .80 and .87 at pre- and post-test assessment, respectively. Cronbach alphas for problem behaviors were .74 and .70 at pre- and post-test assessment, respectively.

**Peer Relationship Measure – Teacher Report.** The Peer Relationship Measure – Teacher Report (Newgent, 2009a) was developed specifically for the PEGS and ARK Programs. It measures teachers' perceptions about peer victimization. Nine items measure bullying behaviors and 9 items measure victimization. Items are scored as 0 = never, 1 = sometimes, and 2 = a lot, with scores ranging from 0 to 18 for each area. Scores reported for both of the measurement areas are totals. A high score indicates a high level of bullying behaviors and/or victimization; a low score indicates a low level of bully behaviors and/or victimization. Cronbach alphas for bullying behaviors were .89 and .90 at pre- and post-test assessment,

respectively. Cronbach alphas for victimization were .78 and .90 at pre- and post-test assessment, respectively.

**Peer Relationship Measure – Self Report.** The Peer Relationship Measure – Self Report (Newgent, 2009b) was developed specifically for the PEGS and ARK Programs. It measures students' perceptions about peer victimization. Nine items measure bullying behaviors and nine items measure victimization. Items are scored as 0 = never, 1 = sometimes, and 2 = a lot, with scores ranging from 0 to 18 for each area. Scores reported for both of the measurement areas are totals. A high score indicates a high level of bullying behaviors and/or victimization; a low score indicates a low level of bully behaviors and/or victimization. This measure is a parallel measure to the Peer Relationship Measure – Teacher Report. Cronbach alphas for bullying behaviors were .07 and .87 at pre- and post-test assessment, respectively. Cronbach alphas for victimization were .81 and .82 at pre- and post-test assessment, respectively.

**Modified Rosenberg's Self-Esteem Inventory (a).** The Modified Rosenberg's Self-Esteem Inventory (a) (Zimprich, Perren, & Hornung, 2005) measures an individual's level of self-esteem (i.e., perception of self-worth, ability, self-satisfaction, and self-respect) and was completed by the students. The 10-item inventory uses a 4-point likert scale (strongly agree, agree somewhat, disagree somewhat, and strongly disagree). Five of the items are reverse coded and the score reported is the total, which ranges from 0–30. A high score indicates a high level of self-esteem; a low score indicates a low level of self-esteem. Cronbach alphas were .60 and .54 at pre- and post-test assessment, respectively.

**Modified Rosenberg's Self-Esteem Inventory (b).** The Modified Rosenberg's Self-Esteem Inventory (b) (Zimprich et al., 2005) measures an individual's self-esteem (i.e., perception of self) and was completed by the students. The 4-item inventory uses a 5-point likert scale (never, seldom, sometimes, often, always). One of the items is reverse coded and the score reported is the total, which ranges from 4–20. A high score indicates a high level of self-esteem; a low score indicates a low level of self-esteem. Cronbach alphas were .59 and -.56 at pre- and post-test assessment, respectively.

## Procedure

Fifteen students were recommended by their teachers for the PEGS and ARK Programs and 15 parental consents/child assents were received. Recommending teachers completed the SSiS–T (Gresham & Elliott, 2008) and the Peer Relationship Measure – Teacher Report (Newgent, 2009a) at the start of the PEGS and ARK Programs and at two months after the conclusion of the PEGS and ARK Programs. Ideally, we would have liked an additional follow-up assessment; however, there was difficulty in securing a longer period of involvement in the assessments. Students completed the SSiS–S (Gresham & Elliott, 2008), the Peer Relationship Measure – Self Report (Newgent, 2009b), the Modified Rosenberg's Self-Esteem Inventory (a) (Zimprich et al., 2005), and the Modified Rosenberg's Self-Esteem Inventory (b) (Zimprich et al., 2005) at the start of the PEGS and ARK Programs and at two months after the conclusion of the PEGS and ARK Programs. All participating students received a certificate of completion at the conclusion of the last session.

Sessions for both programs were co-facilitated by two graduate students in the counseling and educational research programs. Both facilitators passed criminal background checks and had prior professional experience working with children who exhibit problematic behaviors. Supervision was provided to the facilitators by two counseling faculty members overseeing the programs.

## Data Analytic Plan

Each student who participated in the PEGS or ARK Programs was assessed at two time points utilizing a variety of measurement instruments (see Instruments section). Pre-test scores on each of the instruments were initially analyzed using independent-samples *t*-tests to test the underlying assumption that participant scores between the groups were not significantly different. Next, scores were analyzed using independent-samples *t*-tests to assess for significant differences on the post-test assessment scores between the PEGS Program and the ARK Program participants. Finally, paired-samples *t*-tests, comparing pre-test to post-test assessment scores within each program, were used to assess the impact of each of the programs. Effect sizes are reported as small ( $d = .20$ ), medium ( $d = .50$ ), and large ( $d = .80$ ) (Cohen, 1992; O'Rourke, Hatcher, & Stepanski, 2005).

## Results

### Between-Group Analysis

**Teacher-reported measures.** Results were initially analyzed using independent-samples *t*-tests comparing the pre-test assessment scores of the PEGS Program to the ARK Program. Statistical comparisons are displayed in Table 1. Analysis of teacher-reported social skills failed to reveal a significant difference between the two groups,  $t(12) = 0.76; p < .46$ . The effect size was computed as  $d = .76$ , which represents a large effect. Analysis of teacher-reported problem behaviors also failed to reveal a significant difference between the groups,  $t(10.73) = -0.15; p < .88$ . The effect size was computed as  $d = .08$ , which represents a very small effect. Analysis of teacher-reported bullying behaviors failed to reveal a significant difference between the groups,  $t(12) = -0.97; p < .35$ . The effect size was computed as  $d = .97$ , which represents a large effect. Analysis of teacher-reported peer victimization also failed to reveal a significant difference between the groups,  $t(12) = -2.14; p < .054$ . The effect size was computed as  $d = 2.13$ , which represents a very large effect.

Results were then analyzed using independent-samples *t*-tests comparing the post-test assessment scores of the PEGS Program to the ARK Program. Statistical comparisons are displayed in Table 1. Analysis of teacher-reported social skills failed to reveal a significant difference between the two groups,  $t(12) = 0.08; p < .94$ . The effect size was computed as  $d = .08$ , which represents a very small effect. Analysis of teacher-reported problem behaviors also failed to reveal a significant difference between the groups,  $t(12) = -0.28; p < .78$ . The effect size was computed as  $d = .28$ , which represents a small effect. Analysis of teacher-reported bullying behaviors failed to reveal a significant difference between the groups,  $t(12) = -1.56; p < .14$ . The effect size was computed as  $d = 1.56$ , which represents a very large effect. Analysis of teacher-reported peer victimization revealed a significant difference between the groups,  $t(11.29) = -3.48; p < .005$ . The effect size was computed as  $d = 1.84$ , which represents a very large effect.

**Self-reported measures.** Results were initially analyzed using independent-samples *t* tests comparing the pre-test assessment scores of the PEGS Program to the ARK Program. Mean scores, significance, and effect size are displayed in Table 1. Analysis of self-reported social skills failed to reveal a significant difference between the two groups,  $t(3.25) = 1.16; p < .32$ . The effect size was computed as  $d = 5.88$ , which represents a very large effect. Analysis of self-reported problem behaviors also failed to reveal a significant difference between the groups,  $t(13) = 0.56; p < .59$ . The effect size was computed as  $d = .56$ , which represents a medium effect. Analysis of self-reported bullying behaviors failed to reveal a significant difference between the groups,  $t(13) = 1.25; p < .23$ . The effect size was computed as  $d = 1.25$ , which represents a very large effect. Analysis of self-reported peer victimization also failed to reveal a significant difference between the groups,  $t(13) = 1.09; p < .30$ . The effect size was computed as  $d = 1.09$ , which represents a very large effect. Analysis of self-reported self-esteem failed to reveal a significant difference between the groups,  $t(13) = 0.18; p < .86$ . The effect size was computed as  $d = .18$ , which represents a small effect. Analysis of self-reported perception of self also failed to reveal a significant difference between the groups,  $t(13) = -1.17; p < .26$ . The effect size was computed as  $d = 1.17$ , which represents a very large effect.

Results were then analyzed using independent-samples *t*-tests comparing the post-test assessment scores of the PEGS Program to the ARK Program. Mean scores, significance, and effect size are displayed in Table 1. Analysis of self-reported social skills failed to reveal a significant difference between the two groups,  $t(13) = 2.03; p < .06$ . The effect size was computed as  $d = 2.03$ , which represents a very large effect. Analysis of self-reported problem behaviors also failed to reveal a significant difference between the groups,  $t(13) = 0.56; p < .59$ . The effect size was computed as  $d = .56$ , which represents a medium effect. Analysis of self-reported bullying behaviors failed to reveal a significant difference between the groups,  $t(13) = -1.31; p < .21$ . The effect size was computed as  $d = 3.40$ , which represents a very large effect. Analysis of self-reported peer victimization also failed to reveal a significant difference between the groups,  $t(13) = 0.82; p < .43$ . The effect size was computed as  $d = .82$ , which represents a large effect. Analysis of self-reported self-esteem failed to reveal a significant difference between the groups,  $t(13) = 0.79; p < .44$ . The effect size was computed as  $d = .80$ , which represents a large effect. Analysis of self-reported perception of self also failed to reveal a significant difference between the groups,  $t(13) = 0.33; p < .75$ . The effect size was computed as  $d = .33$ , which represents a small to medium effect.

**Table 1***Pre- and Post-Test Comparisons between the PEGS (Traditional) and ARK (Thematic) Program*

Assessment Instrument	Pre-Test			Post-Test		
	<i>T</i>	<i>p</i>	<i>d</i>	<i>t</i>	<i>p</i>	<i>d</i>
Teacher-reported						
SSRS – Social skill	0.76	.46	.76	0.08	.94	.08
SSRS – Problem behaviors	-0.15	.88	.08	-0.28	.78	.28
Bully behaviors	-0.97	.35	.97	-1.56	.14	1.56
Peer victimization	-2.14	.054	2.13	-3.48	.005	1.84
Self-reported						
SSRS – Social skill	1.16	.32	5.88	2.03	.06	2.03
SSRS – Problem behaviors	0.56	.59	.56	0.56	.59	.56
Bully behaviors	1.25	.23	1.25	-1.31	.21	3.40
Peer victimization	1.09	.30	1.09	0.82	.43	.82
Self-esteem	0.18	.86	.18	0.79	.44	.80
Perception of self	-1.17	.26	1.17	0.33	.75	.33

**Within Group Analysis – PEGS**

**Teacher-reported measures.** Results were analyzed using paired-samples *t*-tests comparing the pre-test assessment scores of the PEGS Program to the post-test assessment scores of the PEGS Program. Mean scores, significance, and effect size are displayed in Table 2. Analysis of teacher-reported social skills failed to reveal a significant difference between the pre- and post-test assessments,  $t(10) = 0.38$ ;  $p < .71$ . The effect size was computed as  $d = .11$ , which represents a very small effect. Analysis of teacher-reported problem behaviors also failed to reveal a significant difference between the pre- and post-test assessments,  $t(10) = 1.95$ ;  $p < .08$ . The effect size was computed as  $d = .59$ , which represents a medium effect. Analysis of teacher-reported bullying behaviors failed to reveal a significant difference between the pre- and post-test assessments,  $t(10) = 0.13$ ;  $p < .90$ . The effect size was computed as  $d = .04$ , which represents a very small effect. Analysis of teacher-reported peer victimization also failed to reveal a significant difference between the pre- and post-test assessments,  $t(10) = -0.20$ ;  $p < .84$ . The effect size was computed as  $d = .06$ , which represents a very small effect.

**Self-reported measures.** Results were analyzed using paired-samples *t* tests comparing the pre-test assessment scores of the PEGS Program to the post-test assessment scores of the PEGS Program. Mean scores, significance, and effect size are displayed in Table 2. Analysis of self-reported social skills failed to reveal a significant difference between the pre- and the post-test assessments,  $t(10) = -1.52$ ;  $p < .16$ . The effect size was computed as  $d = .46$ , which represents a medium effect. Analysis of self-reported problem behaviors revealed a significant difference between the pre- and post-test assessments,  $t(10) = 2.81$ ;  $p < .02$ . The effect size was computed as  $d = .85$ , which represents a large effect. Analysis of self-reported bullying behaviors failed to reveal a significant difference between the pre- and post-test assessments,  $t(10) = 0.52$ ;  $p < .62$ . The effect size was computed as  $d = .15$ , which represents a small effect. Analysis of self-reported peer victimization revealed a significant difference between the pre- and post-test assessments,  $t(10) = 2.95$ ;  $p < .01$ . The effect size was computed as  $d = .89$ , which represents a large effect. Analysis of self-reported self-esteem failed to reveal a significant difference between the pre- and post-test assessments,  $t(10) = -0.22$ ;  $p < .83$ . The effect size was computed as

$d = .07$ , which represents a very small effect. Analysis of self-reported perception of self also failed to reveal a significant difference between the groups,  $t(10) = 0.76$ ;  $p < .46$ . The effect size was computed as  $d = .23$ , which represents a small effect.

**Table 2**

*Pre- and Post-Test Comparisons of the Impact of the PEGS Program*

Assessment Instrument	<i>M (SD)</i>		Statistics		
	Pre-Test	Post-Test	<i>t</i>	<i>p</i>	<i>d</i>
Teacher-reported ( <i>df</i> = 10)					
SSRS - Social skill	16.45 (16.48)	14.73 (18.93)	0.38	.71	.11
SSRS - Problem behaviors	92.45 (9.56)	86.55 (14.77)	1.95	.08	.59
Bully behaviors	8.0 (4.56)	7.82 (4.45)	0.13	.90	.04
Peer victimization	6.45 (3.11)	6.64 (3.93)	-0.20	.84	.06
Self-reported ( <i>df</i> = 10)					
SSRS - Social skill	13.27 (7.54)	24.09 (20.46)	-1.52	.16	.46
SSRS - Problem behaviors	68.0 (21.52)	54.45 (23.05)	2.81	.02	.85
Bully behaviors	3.55 (1.86)	3.18 (2.82)	.52	.62	.15
Peer victimization	7.27 (4.2)	5.82 (3.57)	2.95	.01	.89
Self-esteem	19.0 (4.88)	19.27 (3.9)	-0.22	.83	.07
Perception of self	15.27 (2.94)	14.64 (1.69)	0.76	.46	.23

**Within Group Analysis – ARK**

**Teacher-reported measures.** Results were analyzed using paired-samples *t*-tests comparing the pre-test assessment scores of the ARK Program to the post-test assessment scores of the ARK Program. Mean scores, significance, and effect size are displayed in Table 3. Analysis of teacher-reported social skills revealed a significant difference between the pre- and post-test assessments,  $t(2) = 6.25$ ;  $p < .02$ . The effect size was computed as  $d = 3.61$ , which represents a very large effect. Analysis of teacher-reported problem behaviors failed to reveal a significant difference between the pre- and post-test assessments,  $t(2) = 1.84$ ;  $p < .21$ . The effect size was computed as  $d = 1.06$ , which represents a very large effect. Analysis of teacher-reported bullying behaviors revealed a significant difference between the pre- and post-test assessments,  $t(2) = 5.00$ ;  $p < .04$ . The effect size was computed as  $d = 2.88$ , which represents a very large effect. Analysis of teacher-reported peer victimization failed to reveal a significant difference between the pre- and post-test assessments,  $t(2) = 0.00$ ;  $p < 1.00$ . The effect size was computed as  $d = 0$ , which represents no effect.

**Self-reported measures.** Results were analyzed using paired-samples *t*-tests comparing the pre-test assessment scores of the ARK Program to the post-test assessment scores of the ARK Program. Mean scores, significance, and effect size are displayed in Table 3. Analysis of self-reported social skills revealed a significant difference between the pre- and post-test assessments,  $t(3) = -4.14$ ;  $p < .03$ . The effect size was computed as  $d = 2.07$ , which represents a very large effect. Analysis of self-reported problem behaviors failed to reveal a significant difference between the pre- and post-test assessments,  $t(3) = 1.31$ ;  $p < .28$ . The effect size was computed as  $d = .65$ , which represents a medium effect. Analysis of self-reported bullying behaviors revealed a significant difference between the pre- and post-test assessments,  $t(3) = 5.42$ ;  $p < .01$ . The effect size was computed as  $d = 2.71$ , which represents a very large effect. Analysis of self-reported peer victimization failed to reveal a significant difference between the pre- and post-test assessments,  $t(3) = 1.14$ ;  $p < .34$ . The effect size

was computed as  $d = .57$ , which represents a medium effect. Analysis of self-reported self-esteem also failed to reveal a significant difference between the pre- and post-test assessments,  $t(3) = -0.80$ ;  $p < .48$ . The effect size was computed as  $d = .40$ , which represents a small to medium effect. Analysis of self-reported perception of self failed to reveal a significant difference between the groups,  $t(3) = -0.69$ ;  $p < .54$ . The effect size was computed as  $d = .34$ , which represents a small effect.

**Table 3**

*Pre- and Post-Test Comparisons of the Impact of the ARK Program*

Assessment Instrument	<i>M (SD)</i>		Statistics		
	Pre-Test	Post-Test	<i>t</i>	<i>p</i>	<i>d</i>
Teacher-reported ( <i>df</i> = 2)					
SSRS – Social skill	24.0 (4.36)	15.67 (3.51)	6.25	.02	3.61
SSRS – Problem behaviors	92.0 (1.0)	84.0 (8.19)	1.84	.21	1.06
Bully behaviors	5.33 (1.53)	3.67 (1.15)	5.00	.04	2.88
Peer victimization	2.33 (2.08)	2.33 (0.58)	0.00	1.00	0
Self-reported ( <i>df</i> = 3)					
SSRS – Social skill	26.5 (22.29)	49.75 (25.2)	-4.14	.03	2.07
SSRS – Problem behaviors	74.75 (17.52)	61.75 (19.65)	1.31	.28	.65
Bully behaviors	4.75 (0.5)	1.25 (0.96)	5.42	.01	2.71
Peer victimization	10.0 (4.55)	7.75 (5.25)	1.14	.34	.57
Self-esteem	19.5 (4.51)	21.25 (5.32)	-0.80	.48	.40
Perception of self	12.75 (5.5)	15.0 (2.45)	-0.69	.54	.34

*Note.* One teacher failed to return the assessments.

### Discussion

The purpose of this study was to compare and assess the impact of two selective intervention psychosocial education programs (traditional vs. thematic) on measures of social skills, problem behaviors, teacher- and self-reports of peer relationships (bullying behaviors and peer victimization), self-esteem (self-worth, ability, self-satisfaction, and self-respect) and perception of self in a small number of elementary school students. The PEGS and ARK Programs were designed to be short-term, non-stigmatizing programs that can easily augment current school counselor or school-based counseling services. Two groups of students were assigned to one of two programs. A discussion of the comparison between the programs and impact of each program follows.

### Comparison

Findings indicated that there were no significant differences between the pre-test assessment measures when comparing the PEGS and ARK Program participants. That is, the participants in each group were comparable prior to their participation in their respective programs. Therefore, should we find significant differences between the two programs at post-test assessment, we may attribute those differences to the impact of the program. Further, there were no significant differences between the post-test assessment measures when comparing the two programs' participants, with the exception of teacher-reported peer victimization. In other words, participants in each group were comparable after their participation in the respective programs with the exception of participants in the ARK Program having significantly lower levels of

teacher-reported victimization than those in the PEGS Program. Note however that there was no difference between the pre- and the post-test assessment for ARK participants on this measure and only a non-significant increase for PEGS participants.

While these results indicate that the implementation of thematic programming directed at peer harassment does not have a significantly greater positive impact on students than traditional programming directed at students who show more generalized problems, there were some large effects ( $d \geq .80$ ) between the groups. This may indicate that there may have been some differences between the participants of the two programs, although not statistically significant.

### **PEGS**

Findings indicated that there was significant improvement on self-reported problem behaviors and peer victimization when comparing the pre- and post-test assessments for the PEGS Program participants. In other words, students reported fewer problem behaviors and a decrease in victimization by their peers. While not significant, improvement also was found for teacher-reported problem behaviors and bully behaviors and self-reported social skills, bully behaviors, and self-esteem.

### **ARK**

Findings indicated that there was significant improvement on teacher-reported bully behavior and on self-reported social skills and bully behaviors. In other words, students reported increased social skills and both teachers and students reported a decrease in victimization. Additionally, meaningful improvements ( $d \geq .80$ ) were found on teacher-reported problem behaviors. That is, teachers noted fewer problem behaviors in students after their participation in the ARK Program.

## **Conclusions**

Finding effective programming that can positively impact at-risk students can be difficult. Further complicating the issue is the onslaught of thematic programming targeting specific groups of at-risk students (Hartzler & Brownson, 2001). While targeted programming can be beneficial to a select group of students it may exclude other students who can benefit but may not have the same "label." This study showed that the more traditional group (i.e., PEGS) was equally effective as the more thematic group (i.e., ARK).

## **Limitations and Future Directions**

There were several limitations to this study. First, we were limited to working within the parameters the school established. That is, we were limited to 4th and 5th grade males only and we were limited to providing services during their respective lunch periods. It may have been beneficial to have both genders in each group as well as a mix of grades. Second, group sizes were small. While larger group sizes would result in a greater ability to detect a statistically significant difference if one exists, larger group sizes also can result in reduced effectiveness. Third, we were unable to have a no-treatment group. The use of a control group may have resulted in a more robust study. Finally, the unequal group sizes may have impacted the comparison of the two groups. We attempted to adjust for this by using the Satterthwaite method when the equality of variances was significantly different (O'Rourke et al., 2005).

## **Implications**

There are several implications for school and school-based counselors. First, it would be important in program management if school and school-based counselors are made aware that traditional psychoeducational groups are similarly effective to thematic psychoeducational groups. With this information they can make more informed decisions about the type of groups they implement as well as the type of intervention programs they offer and purchase. If the results of this study hold true for other groups of students and other schools, school and school-based counselors who choose to utilize more traditional programming would be able to provide these services to a broader range of students, consistent with the ASCA Model (ASCA, 2005), and not limit it to a select group of students targeted for a specific issue. Additionally, the purchase of thematic intervention programs can be costly given that the use is limited to a smaller number of students and several different types of programs are needed to address students with differing issues.

Second, the PEGS Program is an empirically supported program (see Newgent et al., 2010). It is a short-term, inexpensive, and non-intrusive program that can positively impact students with a variety of underlying issues. School and school-based counselors can easily augment their services with the implementation of this program. School administrators may be more supportive of a program that is both cost effective and would not hinder counselors from fulfilling other duties. The ever changing demands on school and school-based counselors will most likely continue. Counselors need effective tools that they can use to help students address problems, increase self-esteem, improve social skills, and decrease peer victimization.

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# Evaluating Mental Health Literacy and Adolescent Depression: What Do Teenagers “Know?”



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The prevalence of depression increases markedly during adolescence, yet many youth are not receiving the support that they need. One factor that has been speculated as contributing to low rates of care is a lack of mental health literacy about depression and viable sources of support. This pilot study focused on mental health literacy as it relates to adolescent depression and suicidality and represented a pseudo-replication of Burns and Rapee (2006). Overall, participants ( $N=36$ ) in this study were able to differentiate depressed vignettes from non-depressed vignettes and identify common symptoms of depression in their assessments. Also, sources of optimal help identified by participants varied upon the perceived degree of seriousness of the difficulties. Such results offer implications regarding the potential benefit of including adolescents in a more direct way when providing outreach or offering services.

*Keywords:* adolescents, mental health literacy, depression, suicidality, support

Depression in adolescence is of particular relevance, as it can continue into adulthood yet often goes undiagnosed and untreated (Wagner, Emslie, Kowatch, & Weller, 2008). According to the *Diagnostic and Statistical Manual of Mental Disorders-Text Revision (DSM-IV-TR)* (APA, 2000), the diagnostic criteria and duration mirror adult depression in many respects. As in adult depression, adolescent depression can include a variety of symptoms, at least one of which must be either depressed mood or loss of pleasure/interest. Furthermore, the *DSM-IV-TR* stipulates that, if depressed mood is chosen, it may be substituted by irritable mood in adolescents.

The rate of depression increases six-fold between the ages of 15–18 (Hankin, 2006). Approximately eight percent of teenagers—an estimated two million youth from 12–17 years of age—suffered at least one major depressive episode in 2007. Only 39% received some form of treatment for depression in the preceding 12 months. The rate of receiving professional help was much lower among those youth without health insurance (17%). Among all teenagers who obtained treatment, over half (59%) saw a counselor for assistance with their depression. Nearly 37% and 27% of youths saw a psychologist or general practitioner/family doctor, respectively (Substance Abuse and Mental Health Services Administration, 2009).

Given the prevalence of mental illness and its impact on society, it is no surprise that there is a growing interest in *mental health literacy*, a term first used by Jorm et al. (1997). Defined as the “knowledge and beliefs about mental disorders which aid their recognition, management or prevention” (p. 182), mental health literacy also includes knowledge about treatment and from whom to seek help. It has been found, for instance, that family and friends can be vital in the recognition of depressive symptoms (Langlands, Jorm, Kelly, & Kitchener, 2008a). However, Hight, Thompson, and McNair (2005) saw that family members usually recognized symptoms of the individual in hindsight. The general public often does not possess the knowledge base to help someone who is developing a psychotic illness (Langlands, Jorm, Kelly, & Kitchener, 2008b). Kitchener and Jorm (2002) found that individuals who took part in their Mental Health First Aid course showed improvement in recognizing disorders, and their views about treatment of disorders became more in line with those of professionals in the mental health field. In addition, the course reduced their stigma attached to mental disorders, increased their feelings of confidence in providing help, and increased the help provided to others.

Few studies have been conducted on younger populations and mental health literacy. Burns and Rapee (2006) noted, “While there is growing literature on the mental health literacy of adults, to date there has not been a parallel interest in

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the mental health literacy of young people” (p. 227). Wright et al. (2005) looked at young adults’ (ages 12 to 25) ability to pinpoint depression and psychosis and their recommendations for help to be sought. Nearly half of the participants were able to label the depressed vignette as depressed, but only a quarter of participants were able to label psychosis. People who were given the depressed vignette were less likely to choose a correct form of treatment than those given the psychosis vignette. Psychologists and psychiatrists were recommended more frequently for the psychosis vignette than for the depressed vignette, and a family doctor or general practitioner was chosen more often for the depressed vignette than for the psychosis vignette.

Adolescents have been found more likely to consider themselves “very confident” (Jorm, Wright, & Morgan, 2007a, p. 67) to help a peer in need with girls rating themselves as more confident than boys. In addition, across vignettes, confidence in providing help to a peer with a problem was higher for depression (without alcohol misuse) and social phobia than for psychosis and depression with alcohol misuse (Jorm et al, 2007a).

Jorm, Wright, & Morgan (2007b) found differences among Australian youth in the type of help sought for mental disorders. Participants were read vignettes describing youth of similar ages who were experiencing various disorders, then were asked a series of questions that included where they would turn with similar problems. For the vignette describing a teen suffering from depression, adolescents aged 12–17 chose family (54%) most often as a source of help and opted for mental health professional or service most infrequently (2%). Nearly one-third of young adults ages 18–25 selected family (31%) or a general practitioner/medical doctor (31%) on a similar vignette regarding depression. Overall the perceived barriers to help-seeking were personal in nature and did not relate to systemic characteristics, as they noted, “For young people, it is embarrassment or concern about what others think...” (p. 559).

Burns and Rapee (2006) used a vignette-based approach to measure mental health literacy among high school students in Australia. In their study, they utilized the *Friend In Need* questionnaire, created by the authors for that specific study. This instrument offers five short vignettes of teenage students, two of whom (“Tony” and “Emily”) represented youth meant to be clinically depressed. One of the two vignettes (“Emily”) offered a reference to suicidal ideation. The remaining three vignettes were of students facing difficulties, though were not intended to reflect depression.

They found that over two-thirds of participants (68%) accurately labeled “Emily” as depressed, while about one-third (34%) recognized “Tony” as depressed. Female participants were more likely to make a depressed diagnosis in both the “Tony” and “Emily” vignettes than the male participants. Female participants also showed more worry for the depressed vignettes than male participants. Among help-seeking sources, counselors were chosen most often for the helpers of the depressed teens, and this category was followed by friends and family/relatives.

To our knowledge, no study has been conducted on the mental health literacy of U.S. teens as it pertains to adolescent depression. With this point in mind, the current study represents a replication of Burns and Rapee (2006) and offers an initial sample involving older adolescents’ perspectives in the assessment, recovery time, and help-seeking recommendations regarding depression. Our central study questions were consistent with Burns and Rapee and the questions posed by the *Friend in Need* Questionnaire.

## Procedures

Both prior to and after receiving approval by the university’s institutional review board, two of the authors met with the principal of the school where the data was collected. It was determined that eight sections of the school’s psychology and anthropology classes would be appropriate to the topic of study and ages of interest, and the primary author contacted the teachers and shared the following information with them: the parental/guardian consent form, the student consent form, details concerning the data collection process, and pertinent dates of the consent form deadlines and actual administration of the instrument used in this study. Teachers distributed the consent forms to students, who, if interested in possibly participating in the study, took them to their parents/guardians. Signed parental/guardian consent must have been completed and returned to the teachers in a four-day time period, which occurred prior to the date of the administration of the instrument. In both the parental/guardian and participant consent forms, it was made clear that the questionnaire was not a formal test and would take an estimated 25–40 minutes to complete.

On the day of the data collection, one of the two primary authors (JM and MB) went to the classroom, collected the completed parental/guardian consent form, read an abbreviated student consent form to the potential participants after giving a hard copy to them, and asked for questions at the conclusion. Students with unsigned parental/guardian consent forms were given an alternate class assignment, while those students who consented to be in the study completed the *Friend in Need* Questionnaire. No extra credit was granted for participation in the study. Participants completed the questionnaire in their classrooms. In a few instances, participants and the author/administrator were asked to move to a nearby vacant room for the data collection.

Approximately five classes were visited for data collection, and a total of 36 students, 21 of whom were young men, participated in the study. Most participants completed the questionnaire in approximately 20 minutes. The questionnaires were completed in an anonymous manner. In the coding process, a number was given to each questionnaire for tracking purposes only. Finally, the two authors also offered to return to the class after the data administration to further discuss the study; however, no teachers chose this option.

## Instrument

Adolescents' mental health literacy was assessed using the *Friend in Need* Questionnaire (Burns & Rapee, 2006). As previously described, the questionnaire presents five vignettes of young people experiencing various difficulties and solicits both close-ended and open-ended responses from participants. Specifically, participants are instructed to read each vignette and respond to the following general questions: (a) How worried would you be about the person's overall emotional well-being? (b) What do you think is the problem of the person? (c) What aspects of the vignette provided the strongest hints that the person was having difficulties? (d) How long will it take this adolescent to feel better? and (e) Does this person need help from others to cope with his/her problems? The final question also has a supplemental, open-ended question regarding who the helper would be. The respondents are posed with all of these questions for each of the five vignettes. The complete *Friend in Need* Questionnaire can be found in Burns and Rapee (2006).

A coding system was devised for the open-ended responses, specifically on the responses asking about the youth's problem, aspects of the vignette that provided hints, and the appropriate helper. For the question concerning the youth's problem, the responses were filtered into two categories: "depressed" or "not depressed." To qualify as "depressed," the respondents needed to write the words "depressed/depression" or "suicide/suicidal." Any other problems listed were considered to be "not depressed." On the question regarding hints of the problem in the vignette, the coder was looking for responses that fit into diagnostic criteria for depression. The two depressed vignettes each had five diagnostic criteria imbedded in them, and this question tried to tease out whether respondents could identify these key criteria. Hence, the responses were categorized into the five diagnostic criteria of each vignette, with other responses not qualifying. The question that asked about the appropriate helper was split into nine possible categories of helpers. A few respondents, whose answers occurred rarely, were not included in the analyses.

## Results

The findings are described in order of the items presented in the *Friend in Need* Questionnaire. The first question assessed whether adolescents could label a cluster of depressive symptoms in a case vignette as depressed. Respondents were asked, "What do you think is the matter with [name]?" This open-ended question elicited a variety of responses from respondents. Only responses that included "depressed," "depression," "suicide," or "suicidal" were coded as a label of depression. In reviewing the responses to the two vignettes concerning students (Tony and Emily) depicted as depressed, it was evident that the majority of participants accurately labeled the vignettes, as 75% accurately identified Emily as depressed and 58% accurately labeled Tony as depressed.

The majority of respondents also accurately identified the non-depressed vignettes as such. Specifically, over 94% of respondents accurately identified Mandy as not being depressed. All participants (100%) accurately identified Jade as non-depressed, and over 97% accurately identified Nick as not being depressed. Frequencies of depressive codes for all vignettes are included in Table 1. Separate chi-square analyses were conducted to examine any differences in ratings of each vignette between male and female participants. Results indicated that no such differences exist on any of the five vignettes.

**Table 1***Gender and Ratings of Vignette as Depressed*

Total <i>N</i>	Male <i>N</i>	Female <i>N</i>	Chi Square ( $X^2$ ) for gender difference
<sup>a</sup> Emily	27 (75%)	14 (66.7%)	13 (86.7%)
<sup>a</sup> Tony	21 (58.3%)	11 (52.4%)	10 (66.7%)
Nick	1 (2.8%)	1 (4.8%)	0 (0%)
Mandy	0 (0%)	0 (0%)	0 (0%)
Jade	0 (0%)	0 (0%)	0 (0%)

*Note:* Percentages appear in parentheses after frequencies.

<sup>a</sup> = depressed vignette

Second, in regard to respondents expressing greater worry for youth in the depressed vignettes versus the non-depressed vignettes, the *Friend in Need* Questionnaire instructed participants to rate their concern on a five-point scale with higher scores indicating more worry. The scores for the depressed vignettes (Emily and Tony) and non-depressed vignettes (Mandy, Jade, and Nick) were collapsed to produce mean scores of level of worry. A general linear model was used to compare sex differences (participant) in the intensity of worry scores for depressed and non-depressed vignettes. Results indicate that no significant differences existed between male ( $M = 3.40$ ,  $SD = .38$ ) and female participants ( $M = 3.45$ ,  $SD = .33$ ) regarding ratings of worry for the depressed ( $p < .58$ ). No significant differences were found regarding male ( $M = 1.80$ ,  $SD = .41$ ) and female participants' ( $M = 1.81$ ,  $SD = .39$ ) ratings of worry of the non-depressed vignettes either ( $p < .82$ ).

The third question pertained to the length of recovery in the depressed and non-depressed vignettes. The respondents rated each vignette on the perceived length of time it would take the character to feel better on a four-point Likert scale from 1 (one or two days) to 4 (longer than a few months). Higher scores indicate a perception that more time is needed to feel better. Despite the use of a Likert scale, some respondents chose two answers or marked in between two options. When this occurred, the score was adjusted to reflect an average. For example, if someone circled, both "3" and "4," a score of "3.5" was entered. This decision was made to maintain as many respondents as possible, given the small number of the sample. Overall, the respondents rated the depressed vignettes with a mean score of 3.67 ( $SD = .37$ ), which indicates a recovery period of between "one or two months" and "longer than a few months." This finding compared to a lower mean score of 1.97 (one or two days,  $SD = .45$ ) for the non-depressed vignettes. Scores on the two depressed vignettes and scores on the three non-depressed vignettes were collapsed to create a composite mean score of recovery time for depressed (dependent variable) versus non-depressed vignettes (dependent variable).

A two-way MANOVA was conducted to determine if sex differences (of respondents) made a difference in the length of the recovery for both scenarios (depressed versus non-depressed). The overall model was statistically significant for the recovery time between the depressed and non-depressed vignettes  $F(1, 34) = 651.31$ ;  $p = .01$ . The MANOVA did not reveal a significant interaction between participant gender and recovery time of vignettes ( $p < .27$ ). Female respondents rated both the depressed vignettes ( $M = 3.82$ ,  $SD = .24$ ) and non-depressed vignettes ( $M = 2.03$ ,  $SD = .43$ ) higher than male respondents who rated the vignettes as 3.57 ( $SD = .53$ ) and 1.93 ( $SD = .47$ ) respectively, but this difference was not statistically significant.

Fourth, participants were asked to identify the elements of the vignette that demonstrated whether the fictitious teens were having emotional troubles. The two depressed vignettes (Emily and Tony) contained criteria of a Major Depressive Episode as described in the *DSM-IV-TR* (APA, 2000). In the case of Emily, respondents readily identified indicators of suicide (91%) and self-worth (72%). Respondents were less likely to identify symptoms of loss of interest (19%), fatigue (22%), and mood (19%) in this case. (See Table 2 for more complete results.) In the case of Tony, a majority of respondents identified loss of interest (75%) and weight loss (58%). Respondents were less likely to identify Tony's fatigue (44%), insomnia (39%), and diminished ability to think or concentrate (39%).

**Table 2***Identified Symptoms of Distress for the Two Depressed Vignettes by Sex*

Symptoms	Percentage total (N)	Percentage male (N)	Percentage female (N)	$\chi^2$
<u>Tony</u>				
Fatigue/loss of energy	16 (44.4%)	8 (38.1%)	8 (53.3%)	.36
Insomnia	14 (38.9%)	9 (42.9%)	5 (33.3%)	.51
Weight loss/decreased appetite	21 (58.3%)	13 (61.9%)	8 (53.3%)	.61
Diminished ability to think	14 (38.9%)	7 (33.3%)	7 (46.7%)	.42
Diminished interest in activities	27 (75%)	18 (85.7%)	9 (60%)	.08
<u>Emily</u>				
Diminished interest in activities	7 (19.4%)	5 (23.8%)	2 (13.3%)	.67
Fatigue/loss of energy	8 (22.2%)	5 (23.8%)	3 (30%)	.78
Depressed mood (sad/tearful)	7 (19.4%)	3 (14.3%)	4 (26.7%)	.35
Feelings of worthlessness	26 (72.2%)	16 (76.2%)	10 (66.7%)	.53
Suicidal thoughts	33 (91.7%)	10 (90.5%)	14 (93.3%)	.76

*Note.* Significant differences between male and female ( $p < .05$ ) on  $\chi^2$  analysis.

Finally, after noting which symptoms were strong indicators of problems, respondents answered an open-ended question about sources of help to aid the person in the vignette. For all five vignettes, participants answered whether they thought the person in the vignette needed help from another person. The options included “no,” “yes,” or “don’t know.” If the respondents endorsed that the person did need help, they were asked to answer a follow-up question indicating who they think should help the person. For the depressed vignettes, 58% of respondents indicated that Tony needed help, and 75% indicated the same for Emily.

In regard to the type of helpers, participants’ responses were broken down into nine categories of helpers, including counselor; friends; family; professional; psychologist; psychiatrist; doctor; teacher; and someone who has had the same difficulty. Some coding decisions included how to categorize responses not explicitly in the list. Some of these included counseling, school counselor, and guidance counselor, which were included in the category of counselor. For the friend category, other responses included “peers” and “someone who knows him/her well.” For family, “parents,” “relatives,” “siblings/brother/sister” also were included. Non-specific terms were included in the professional category, including specialist, shrink, therapist, psychotherapist, and family therapist. Other responses included in the psychiatrist category were “doctor for depression/depressed kids” and “doctor who prescribes antidepressants.” Some responses that were not coded included *third party*, *new people*, *anyone*, *role model*, *someone he/she doesn’t know*, and *everyone*.

Nearly half of the participants (47%) identified the family as the suggested primary helper for Tony, while over one-third (36%) of participants suggested a counselor. The same percentage (36%) identified the family and a psychiatrist, respectively, for Emily, as the best sources of help (see Tables 3-4 for more complete results).

**Table 3***Recommended Source of Help for Tony*

Help Source	Total N (percentage)	Male N (percentage)	Female N (percentage)	$\chi^2$
Counselor	13 (36.1)	7 (33.3)	6(40)	.68
Friends	11 (30.6%)	5 (23.8)	6 (40)	.46
Family	17 (47.2)	10 (47.6)	7 (46.7)	.95
Professional	11 (30.6)	5 (23.8)	6 (40)	.46
Psychologist	7 (19.4)	3 (14.3)	4 (26.7)	.42
Psychiatrist	2 (5.6)	2 (9.5)	0 (0)	.50
Teacher	1 (2.8)	1 (4.8)	0 (0)	1.00
Someone w/ same experience	1 (2.8)	0 (0)	1 (6.7)	.42
Doctor	36 (100)	21 (100)	15 (100)	n/a

**Table 4***Recommended Source of Help for Emily*

Help Source	Total N (percentage)	Male N (percentage)	Female N (percentage)	$\chi^2$
Counselor	6 (16.7)	4 (19)	2 (13.3)	1.0
Friends	12 (33.3)	8 (38.1)	4 (26.7)	.47
Family	13 (36.1)	7 (33.3)	6 (40)	.68
Professional	9 (25)	5 (23.8)	4 (26.7)	1.0
Psychologist	9 (25)	5 (23.8)	4 (26.7)	1.0
Psychiatrist	13 (36.1)	7 (33.3)	6 (40)	.68
Teacher	36 (100)	21 (100)	15 (100)	n/a
Someone w/ same experience	36 (100)	21 (100)	15 (100)	n/a
Doctor	36 (100)	21 (100)	15 (100)	n/a

**Discussion**

The primary purpose of this study was to examine the level of teenagers' mental health literacy specific to adolescent depression. Because it was a pilot study that involved a relatively small sample size, the findings are admittedly limited in generalizability. However, even with the small sample size, the results offer initial points of comparison to Burns and Rapee's (2006) larger scale study. First and perhaps foremost, the level of detection of adolescent depression was relatively high in the present study, yet no significant differences were found as they related to gender. Over half of the

participants correctly labeled both depressed-based vignettes (Emily and Tony) as being depressed, and three in four participants indicated that Emily was depressed. To their credit, participants rated both depressed vignettes as highest in terms of depression.

This finding is noteworthy. In Burns and Rapee (2006), the corresponding findings of correctly identifying depression in Emily and Tony were 68% and 34%, respectively. The higher rating of Emily as depressed was similar in both settings, yet the rating of Tony as depressed was sizably different with American participants being more inclined to have viewed the fictitious student as depressed.

A closer investigation of this finding points to critical symptoms chosen in the participants' assessment. The vignette of Emily featured pointed comments of suicidality, and, to no surprise, it was this characteristic that was almost uniformly (92%) expressed by participants when asked about the "strongest hints that something was wrong." The element of suicidality also was foremost in Burns and Rapee (2006) in reference to Emily, but its expression was lower (77%) among the Australian sample. At least two possibilities are present. First, it is conceivable that the Australian teenagers were not as concerned about the suicidal ideation as the U.S. participants in the present study. A second possibility is that the awareness of suicidality among adolescents has increased in more recent years in the U.S., prompting a higher rate among the U.S. teenagers.

Suicidality was absent in the vignette of Tony. However, other signs of depression were present, and these symptoms included anhedonia, fatigue, weight loss, insomnia, and diminished ability to think/concentrate. Both U.S. participants in the present study and Australian participants in Burns and Rapee (2006) placed "diminished loss of interest" as the primary symptom of an emotional difficulty at nearly identical rates (73% and 75%, respectively). The same held true for the second-rated symptom (weight loss) in both samples, again expressed by nearly the same percentage (58% in the present study and 61% in Burns and Rapee). The consistency in the ranking and percentages of both samples reflects the teenagers' recognition of lowered interest levels and appetite difficulties leading to weight loss when an adolescent is experiencing depression. In actuality, both behaviors do indeed tend to be two of the six most frequent symptoms among teenagers who are depressed (Roberts, Lewinsohn, & Seeley, 1995).

To their credit, participants in the present study also were able to differentiate the depressed vignettes from the non-depressed vignettes. Mandy was feeling upset over a relationship termination initiated by her former boyfriend that occurred three days prior. Jade expressed family disruption and had become intoxicated at a recent party. Meanwhile, Nick was coping with the loss of a grandparent. None of these vignettes offered significant amounts in the way of genuine depression, and by and large, the majority of participants detected that their respective problems were not severe. A mere 6% of participants indicated that Mandy was depressed. Similarly, none of the participants indicated that Jade was depressed, and only 3% of them assessed Nick to be depressed. This finding offers support for the overall level of mental health literacy of the sample as it pertains to adolescent depression. Moreover, in comparison to the Australian participants in Burns and Rapee (2006), the American sample fared somewhat better: They found that, though none of their participants found Jade to be depressed, 11% and 9% of teenagers in their study did relate Nick and Mandy, respectively, to be depressed.

The participants in the present study demonstrated significantly more concern and anticipated a longer recovery period for the students in the depressive vignettes than in the non-depressed vignettes. In our study, a significant difference was accurately found in estimated recovery time.

The average duration of an initial depressive episode is eight months when no treatment is received (Brent & Birmaher, 2002). These findings add support to the conclusion that the sample possessed a considerable level of literacy. Given the fact that, to our knowledge, this pilot study is the first to assess mental health literacy for adolescent depression among American teenagers, no point of comparison exists. With this point in mind, the finding was relatively surprising. The adolescents in the present study were astute in their detection, concern, and estimated time of recovery, which could be related to a knowledge set based on their classroom education or acquired in other ways (i.e., having a friend who was depressed). Regardless of the mode of acquisition, the adolescents in this study offered greater concern for the fictitious students in the midst of a depressive episode and estimated their recovery more accurately than those students in the non-depressed vignettes.

It was mildly surprising that, unlike Burns and Rapee (2006) and Gifford-May (2002), no significant difference was found in regard to gender and mental health literacy. Burns and Rapee found that girls “clearly demonstrated” higher literacy in their abilities to not only correctly label the depressed vignettes, but also in their expression of greater concern over the students in those same vignettes (p. 232). One point of speculation on their part dealt with the higher levels of depression experienced by young women in later adolescence (Lewinsohn, Rohde, & Seeley, 1998). However, given the absence of significant differences in gender within the sample in the present study, it raises the possibility that young men in the U.S. are more insightful regarding adolescent depression than anticipated.

Burns and Rapee (2006) indicated that the primary reason for raising the mental health literacy of adolescents “is to increase the likelihood that young people can access the most appropriate help when needed” (p. 233). Taken from combined data from 2005 and 2006, an estimated 12% of American youth aged 12–17 obtained professional help for emotional or behavioral problems, and females were more likely than males to receive professional help (Office of Applied Statistics, 2008). However, the literature points to the fact that many other teenagers in need of mental health assistance for various disorders do not receive it. In fact, a mere 39% of those adolescents suffering a depressive episode receive treatment (Office of Applied Statistics, 2009).

The recommended sources for help in our sample were family and counselor, respectively, for Tony, and family and psychiatrist, both at equal percentages, for Emily. For the vignette of Emily, counselor ranked sixth of the nine helping sources. This finding is in contrast to the real-world conditions where nearly 60% of those teenagers with depression in 2007 saw or talked to a counselor in their treatment (Office of Applied Statistics, 2009).

Though the reasoning behind the choices of the helping sources was not sought, the selections lead to intriguing possibilities. First, in the case of Tony, the primary helping source was family, despite information in the vignette that the family system was deteriorating over a parental separation. Even if that played no role in the participants’ responses, the choice of family in soliciting help is striking in that parent-adolescent conflicts increase during early adolescent years (Laursen, Coy, & Collins, 1998). Suicidal adolescents reported difficulty in communicating with parents, tremendous stress in their home life, and a distressed relationship with one or both parents (Bostik & Everall, 2006). However, this finding is consistent with a qualitative study (McCarthy, Downes, & Sherman, 2008) pointing to beneficial parental partnerships that developed during depressive episodes and were instrumental in the teenager getting professional help. Counselor, the second recommended helper choice in the vignette of Tony, may not be as surprising. The school from which the data were collected does have a staff of professional school counselors, and this finding may speak to the participants’ level of comfort with counselors.

The topic of recommended helper was much different in the vignette of Emily, as the choices were much more equal in terms of the percentages. The selection of psychiatrist as the second recommended helper may point to the participants’ perception of the potential for harm and their connotation that a physician with mental health expertise and prescription privileges was needed. In a similar vein, the designations of psychologist and professional were closely behind psychiatrist in recommended helpers, again suggesting the participants’ notion that highly trained professionals who likely have a doctoral degree were needed to aid Emily. This finding mirrors recent research, as 27% of those adolescents having a depressive episode saw their family physician or a general practitioner. Roughly the same number sought help from a psychiatrist or psychologist (Office of Applied Statistics, 2009).

Surprisingly, friends were the third most common choice of helper in a case of a student marked by suicidal ideation. With the potential for harm in this student, friends may not be the best source for initial help. However, participants in the present study may have thought that friends would be supportive during an emotionally difficult period. Finally, the lower ranking of the counselor designation may be connected with a perception that a counselor is sought for less complex difficulties.

Burns and Rapee (2006) found that counselor and friend were the two primary overall recommended sources of help. In regard to counselors, they noted that this finding may be reflective of the “access and familiarity” that adolescents in many Australian schools possess with this type of professional (p. 233). Overall, however, the participants in their study offered far lower rankings of a psychologist, professional, or psychiatrist as a source of help in the depressed

vignettes. This finding could point to a familiarity by American teenagers with medical professionals, particularly with the prevalence rate of medication prescribed to this population in the U.S. compared to European countries (Levin, 2008).

## Limitations

Limitations are clearly evident in this study. As previously noted, the small sample size that is consistent with pilot studies restricts generalizability. The sample size also may have been composed of more sophisticated students in mental health, as many students in the sample were enrolled in a psychology class. Burns and Rapee (2006) pointed out that the vignette-based instrument of the *Friend in Need* Questionnaire is consistent with the manner in which other mental health literacy studies have been conducted. However, they added, “The extent to which such data can be translated into what actually is likely to happen in the real world is unclear” (p. 234). They also noted that a subsequent challenge for research in this area includes the development of research modalities that examine literacy in a naturalistic setting, such as interviews with adolescents. This suggestion connects to Dundon’s (2006) call to bring forth the “voice of the adolescent” that has been lacking in the research on adolescent depression (p. 384).

## Implications

This pilot study represents a point of entry in studying American teenagers’ mental health literacy in regard to teen depression. Participants in this study showed the ability to correctly differentiate depressed vignettes from non-depressed vignettes and, in their assessment, indicated relevant symptoms of depressive symptoms faced by adolescents. Overall they also expressed sources of help that varied upon the perceived degree of seriousness of the difficulties. The outcomes offer implications regarding the potential benefit of including adolescents in a more direct way when providing outreach or offering services. They demonstrated an accurate understanding of when more intense levels of care could be beneficial.

The study produced results that also warrant further exploration of the relationships between youth and parents during adolescence. Although this developmental period can be marked by tumultuous relationships between them, there may be wisdom in providing communication skills to strengthen such relationships. Such efforts could result in more disclosure of depressive symptoms to parents, which may expedite the process of getting help as opposed to sharing such struggles only with peers. In addition to implications for teens and parents, this research can help shape additional studies in expanding the understanding of literacy.

Future research calls for additional mental health literacy investigations marked not only by larger sample sizes, but also by an in-depth investigation of adolescents of various racial/ethnic differences within the sample. Higher rates of adolescent depression have been found in youth of Latino descent (Guião & Thompson, 2004; Twenge & Nolen-Hoeksema, 2002), for instance, and it would be important to evaluate the mental health literacy levels among respective backgrounds. With teenage depression being a pressing matter in adolescent mental health, the domain of mental health literacy in regard to this disorder is a vital one that merits additional research.

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# Learning to Teach: Teaching Internships in Counselor Education and Supervision



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**In an effort to ensure the efficacy of preparing emerging counselors in the field, CACREP standards require that by 2013 all core faculty at accredited universities have a doctorate in Counselor Education and Supervision. However, literature suggests that a disparity may exist in the preparation of counselor educators and the actual responsibilities of faculty members. As such, the present study investigated CACREP-accredited doctoral programs' preparation of students to teach from the perspective of both students and program coordinators. Results support a didactic course in teaching and a co-teaching internship to help doctoral students learn to develop course materials, manage classroom behavior, and develop a teaching style and philosophy. Recommendations for effective counselor education training practices are provided.**

*Keywords:* counselor education, faculty, CACREP, doctoral students, teaching

The field of counselor education continues to grow and with the rise in counseling programs there is an increased need for doctoral level counselor educators. In support of this need, the 2009 Council on Accreditation of Counseling and Related Educational Programs (CACREP) standards require that by 2013 all new core faculty have a doctorate in Counselor Education and Supervision (CES), since they are trained to teach, conduct research, and contribute service to the counseling profession (Sears & Davis, 2003). The training mission of CACREP-accredited CES doctoral programs meets the growing interest in reform for graduate education and the needs of a changing academy (Austin & Wulff, 2004).

An examination of the literature raises curiosity about the consistency between graduate preparation and the roles and responsibilities of faculty members. For example, faculty members spend more than half their time on teaching (Davis, Levitt, McGlothlin, & Hill, 2006; Golde & Dore, 2001), yet research is often the dominant focus of doctoral-level training. This leaves graduates better prepared for the role of researcher and less prepared for the role of teacher (Golde & Dore, 2001; Heppner & Johnston, 1994; Orr, Hall, & Hulse-Killacky, 2008). For example, Rogers, Gill-Wigal, Harrigan, and Abbey-Hines (1998) found that counseling faculty ranked experience in the area of teaching higher than publication experience in the faculty selection process. The focus on research in doctoral preparation appears contrary to what programs want in faculty—that is, well-rounded faculty who are prepared to teach, conduct research, and provide service to their institution, profession, and community.

According to Burke (2001), doctoral programs typically prepare students for careers at research institutions, and in doing so offer graduate fellowships, assistantships, and other training opportunities in research. This traditional model emphasizes research preparation while paying little attention to other faculty responsibilities like teaching (Rogers et al., 1998; Wulff, Austin, Nyquist, & Sprague, 2004). Consequently, many new faculty members lack didactic and hands-on training in teaching. Heppner (1994) supports this notion and found few graduate programs had systematic curricular experiences designed to prepare graduate students to teach, and those that did typically involved two to three days of seminar-based instruction that emphasized topics like grading and academic dishonesty. Without formal curricular experiences designed to train teachers, doctoral students who plan to enter a career in academia are too often not receiving training in the basic aspects of how to teach. As a result, new faculty are learning to teach during their first year while simultaneously adapting to a new professional environment, and in some cases developing a research agenda (Berberet, 2008; Burke, 2001).

A few studies that examined early experiences of new assistant professors have been identified in the literature. In a qualitative study by Magnuson, Black, and Lahman (2006), new assistant professors in counselor education were

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interviewed about their first three years as academicians. One participant described feeling “competent clinically,” but “completely ill prepared” for the role of counselor educator (p. 176). Wulff et al. (2004) investigated how graduate students’ experiences contributed to their development as educators and the types of training that most effectively prepared them for the professoriate. Their findings underscored a lack of “systematic feedback and mentoring” (Wulff et al., p. 62) in graduate students’ development as educators. Students reported their departments did not prepare them for the role of educator or provide feedback on their teaching skills. For students who did receive feedback, it was not “thorough or carefully designed to help them grow as teachers” (Wulff et al., p. 62). Consequently, participants relied on formal and informal feedback from students as well as their students’ grades to identify their most effective teaching strategies (Wulff et al.).

Doctoral students sometimes gain experience as teaching assistants (TA), yet these experiences may not adequately prepare them for the activities necessary for successful faculty careers. Although TA opportunities can help graduate students learn how to deliver a lecture and evaluate student work, these assistantships often serve as “mechanisms for financial aid and provide a labor pool of junior instructors for the university” (Golde & Dore, 2001, p. 25). According to Fagen and Suedkamp Wells (2004), “Teaching assistants are thrown into teaching environments in a sink-or-swim manner. No advice, preparation, or supervision is given” (p. 84). Therefore, one cannot assume that teaching assistantships are the answer to preparing doctoral students for the professoriate.

Without formal curriculum designed to train teachers, students who plan to enter a career in academia lack training in important aspects of teaching such as developing a teaching philosophy, incorporating information technology into the classroom, and creating inclusive classroom environments (Golde & Dore, 2001). This lack of training prevents aspiring faculty from truly understanding the art of teaching; that is, guiding students to new levels of understanding rather than standing in front of the room and lecturing (Wulff et al., 2004).

Researchers suggest that graduate students who experience progressively challenging teaching roles with faculty supervision benefit most from their graduate teaching experiences (Wulff et al., 2004), yet less than 50% of graduate students receive appropriate training before they enter the academy and they lack appropriate supervision to help enhance their teaching skills (Fagen & Suedkamp Wells, 2004). Accordingly, recommendations to graduate programs to provide greater opportunities for students to develop teaching skills have been proposed. One such opportunity is the teaching internship, which can help broaden the program emphasis beyond that of research to better prepare students for jobs in academia (Nerad, Aanerud, & Cerny, 2004).

According to Burke (2001), requiring a teaching internship for doctoral students can lead to a powerful climate change in academe that benefits graduate students, their doctoral programs, their institutions, and higher education as a whole. Burke contends that adding an elective or a required course in teaching is not enough. Rather, doctoral programs should provide students with varied teaching opportunities that become increasingly more demanding, require more responsibility, and allow for activities including but not limited to advisement and the development of a teaching philosophy (Wulff & Austin, 2004). It is important to note that adding a teaching internship is not intended to deemphasize the importance of research; rather, doctoral training for the professoriate should be strengthened to include emphasis on the most time-consuming activity of a professor—*teaching*.

## Rationale for the Study

CACREP-accredited doctoral programs have responded to the growing interest in reform in graduate education by increasing their emphasis on training the next generation of faculty to teach. Zimpfer et al. (1997) reported that counselor education doctoral programs rated instructional and co-teaching activities as highly important student activities, yet a description of such teaching activities and an investigation of their effectiveness was not provided. According to CACREP Doctoral Standard III.B,

Doctoral students are required to complete doctoral-level counseling internships that total a minimum of 600 clock hours. The 600 hours include supervised experiences in counselor education and supervision (e.g., clinical practice, research, *teaching*). The internship includes most of the activities of a regularly employed professional in the setting. The 600 hours may be allocated at the discretion of the doctoral advisor and the student on the basis of experience and training. (CACREP, 2009, p. 54; emphasis added)

This standard, however, does not specifically describe or offer suggestions on how doctoral programs should train their students to teach or how a teaching internship should be developed and implemented. CACREP Standard II.B.2 also mandates students should be provided with opportunities to “develop collaborative relationships with program faculty in *teaching*, supervision, research, professional writing, and service to the profession and the public” (CACREP, 2009, p. 531; emphasis added). Finally, as stated in the “Doctoral Learning Outcomes” section of the 2009 CACREP Standards, graduates should be knowledgeable about theory and methods related to teaching and they should have developed their own philosophy of teaching.

Our interest in this topic grew out of our experiences learning to teach at the graduate level. The first author learned to teach by co-teaching with a faculty member when she was a doctoral student, even though her program did not have a formal teaching internship. The faculty member then required doctoral advisees to complete a formal teaching internship until the time her program made the decision that all counselor education doctoral students were required to complete a didactic course on teaching as well as complete a teaching internship. The second author completed a didactic course as part of her doctoral program, and did her teaching internship with the first author. Our basic assumption going into the study was that completing a teaching internship is important in helping doctoral students become competent teachers. We discussed our assumptions and thoughts about the teaching experiences of CES students before and during the current study.

A review of the counseling literature uncovered no research related to how doctoral students in counselor education are being trained to teach in accordance with CACREP standards. Thus, CES students who plan to spend a significant portion of their academic careers teaching are not able to access information that describes how CES graduates are best prepared to teach, specifically what works and what does not work from the perspectives of faculty and other students. To address this gap in the literature, we conducted a preliminary study to answer the following research questions: (a) How are doctoral programs in counselor education training their CES students to teach? And, (b) What are the experiences of CES students who have completed a teaching internship?

## Methodology

We used both quantitative and qualitative questions to answer the research questions. We collected descriptive data to investigate how counselor education programs are training CES students to teach and used general qualitative inquiry to learn about the teaching internship experiences of CES students. Our study was conducted in two phases. In Phase 1, we surveyed CES professors who were doctoral coordinators about the training their programs provide to doctoral students with regard to teaching. In Phase 2 we surveyed CES students who were completing or had recently completed their teaching internship. We could not find an appropriate survey for our study, so we developed questions for both phases of the study based on our review of the literature on teaching at the collegiate level.

For Phase 1 of the study, we sent email surveys to the doctoral coordinators for all CACREP-accredited CES programs. The survey, which included the language from CACREP (2009) Doctoral Standard III.B, consisted of the following questions: (a) How many doctoral students are accepted into your program each year? (b) What is the main focus of your program (i.e., train faculty, train researchers, train supervisors and practitioners)? (c) How does your program meet CACREP Doctoral Standard II.B? (d) Does your program offer or require a didactic teaching course? (e) Does your program offer or require a teaching internship? And, (f) What other opportunities does your program offer that allow doctoral students to gain teaching experience? At the time we collected data there were 44 CACREP accredited doctoral programs, and despite repeated contacts with program coordinators encouraging their participation, we received responses from only 16 doctoral coordinators (36% response rate).

For Phase 2, we sent email surveys containing open-ended questions to the ten doctoral coordinators who responded that their programs offered a teaching internship—not all programs offered a teaching internship—asking them to forward the survey to students currently completing or who had completed their teaching internship. Fourteen students responded and all questions were answered. The student survey noted we were looking specifically at the teaching internship experience, not teaching assistant experiences, and asked questions about (a) teaching experiences prior to the doctoral teaching internship, (b) what students appreciated most about the teaching internship, (c) what they found most and least helpful about the teaching internship, (d) if they had a separate didactic course related to teaching, what was most and

least helpful about the course, (e) what would they have liked to have known before they started the teaching internship/co-teaching experience, and (f) how prepared they felt to teach independently after completing the teaching internship?

## Results

CES program coordinators provided commentary on the status of the teaching internship at their institution (Phase 1), and doctoral students on their experiences with the teaching internship (Phase 2).

### Phase 1: Program Coordinator Responses

Coordinators for the 16 programs noted they typically accepted six CES students a year. With regard to the main focus of the program (i.e., train faculty, train supervisors and practitioners, train researchers), 10 coordinators noted their program focused on training counselor education faculty, one program emphasized training of counselor education faculty as well as training of supervisors and practitioners, one program focused exclusively on training supervisors and practitioners, and four programs had an equal balance between all three areas.

With regard to how programs met the CACREP standard regarding teaching, the responses were varied with 15 of 16 participants responding to this question. Three coordinators noted their programs required no teaching experience as part of doctoral training. Of these, two noted that while their programs did not require a teaching experience *most* CES students co-taught a course with a faculty member. Nine coordinators said their students must complete a formal teaching internship, which typically entailed teaching a master's level lecture course with a program faculty member. Of the programs that required a teaching internship, eight also required that students complete a didactic course on college teaching. Four coordinators noted they offered the course on teaching in their department, and four participants noted the required teaching course was offered outside of their department. When asked what other opportunities their programs offered for CES students to gain additional teaching experience, eight coordinators responded that their students had the opportunity to teach an undergraduate course independently, three programs provided opportunities for students to lead workshops, and two programs provided opportunities for CES students to teach master's level courses independently.

### Phase 2: Experiences of CES Student Respondents Who Completed the Teaching Internship

As noted, 14 doctoral students responded to Phase 2 of the study. They were asked to answer questions about their experiences prior to, during, and following their teaching internship. Eight respondents reported they had some level of teaching experience prior to their doctoral programs, which included teaching at the K–12, undergraduate, and master's level. Following the principles of the constant comparative method of analysis (Lincoln & Guba, 1985), we reviewed and coded the responses to the remaining eight questions independently and placed them in categories. Then we met to discuss our independent categories until we came to consensus about the categories' titles and meanings.

We took several steps to verify our findings. First, we used multiple participants as a form of data triangulation (Creswell, 2007; Patton 2002). Second, we analyzed the data independently and then together, which is a form of investigator triangulation (Lincoln & Guba, 1985; Patton, 2002). We also revisited participant responses when necessary throughout the analysis process, which provided us with opportunities to remain aware of potential research biases as well as to support or refute our categories. Finally, we used "thick description" (i.e., quotes) from the participants to add detail to their experiences (Lincoln & Guba, 1985).

Based on our analysis, responses emerged in the following four categories: (a) most and least helpful aspects of the teaching internship, (b) most and least helpful aspects of the didactic course on teaching, (c) what students should know before starting their teaching internship, and (d) how prepared students felt to teach independently. Responses will be described in detail, including exemplary quotes from the participants.

**Most and least helpful aspects of the teaching internship.** According to one respondent, the teaching internship is an opportunity for doctoral students to observe, model, and collaborate with "trusted and experienced" professors in preparation for their careers as counselor educators. Of the 14 doctoral students who responded, only one person wrote that the teaching experience was not helpful. The remaining respondents appreciated the support and guidance provided by the professors with whom they taught, which according to one respondent helped guide the student through "the rough spots" and improved his/her teaching skills. One respondent wrote, "I appreciated working closely with my supervisor

to ensure that I had the support necessary to do the job right.” Another respondent shared that support and guidance were received through “bouncing ideas and feelings off” professors and collaboration on curriculum development and leading class discussions.

Respondents also appreciated the autonomy fostered by co-instruction opportunities, which allowed them to “have control over what assignments were being given.” One respondent underscored the importance of co-creating course syllabi and being involved with “in-class demonstrations and mini-lectures.” The flexibility and freedom to generate course curriculum and relevant materials encouraged the development of teaching philosophies and styles, both of which are essential to effective pedagogy. Another respondent stated, “My professor allowed me to choose half of the lectures and create my own materials for the class. I felt a sense of independence and empowerment as a co-instructor.”

Weekly teaching internship meetings where doctoral students and a professor met either individually or in a group to discuss ideas and concerns related to the teaching internship were described as beneficial. Respondents appreciated sharing ideas and hearing “strengths and areas of improvement” with regard to their teaching competencies. One respondent noted “meeting with the instructor of record to co-plan for [class]... helped me to deal with different problems that arose... [as well as] having trust and confidence placed in my abilities and me.”

Having a sense of being supervised too closely by the faculty co-instructor, however, was described by a few respondents as unhelpful, as the presence of the professor “made it hard to establish rapport and authority with students.” Feelings of frustration arose for one respondent when students would bypass the doctoral student and go directly to the faculty member of record “when it came to issues of grades, or syllabus-dictated course requirements.”

Additionally, although the majority of respondents viewed professors as experienced and excellent role models, several observed faculty who “did not model successful teaching strategies” or did not have a mastery of the material. One respondent stated, “Having to meet in a tiered supervision group with a professor who did not understand the unique aspects of the school counseling setting was not helpful.”

The “hands-on” training approach of the teaching internship was described as a valuable component of the experience as it promoted doctoral students’ observation and participation in realistic roles and responsibilities of professors. One respondent indicated, “I really got to experience how much prep work goes into teaching.” Others noted the opportunity “to teach a variety of courses” and “interact with different students” helped strengthen their abilities to reach and teach “all types of thinkers.” Some participants reported, however, that they felt unprepared for the “hands-on” approach, and found a number of characteristics of the teaching internship unhelpful. For example, one respondent noted, “prior knowledge of the level of preparation needed to teach a subject would have been helpful.” Another respondent struggled with “not knowing the level of competence of the students ahead of time,” and a third respondent found it “challenging to teach some students who were very unengaged in the course.”

**Most and least helpful aspects of the didactic teaching course.** Most graduate student respondents found their didactic course on teaching helpful in preparing them to teach. In particular, the didactic course provided opportunities for doctoral students to develop syllabi, exams, and grading rubrics, as well as receive feedback from professors and classmates. One respondent wrote,

Every assignment and class meeting was valuable. Assignments included writing a syllabus from start to finish and revising it after receiving feedback, keeping a journal on relevant topics (philosophy of teaching and learning, dealing with problems from students or other situations, our own biases), writing a sample test utilizing different types of test items, sharing and critiquing a video of us teaching, and creating a teaching portfolio that includes our philosophy of teaching, the things we created, and how we would evaluate students and ourselves.

Another respondent stated that the course on teaching required that respondents read the text they would be teaching the semester prior to teaching. This assignment, as described by the respondent, was “helpful in developing and receiving feedback on a tentative syllabus and lesson plans.” Respondents also indicated they enjoyed the opportunity to interact with other doctoral students, allowing for the comparison of “experiences” and acquisition of “new ideas.” Overall, these didactic experiences increased respondents’ knowledge of the course content, and furthered the development of their basic teaching skills and overall teaching philosophies.

Although many respondents found the didactic component of the teaching internship helpful, a few respondents shared that the course overemphasized the development of lesson plans. One respondent noted, “it was least helpful to develop individual lesson plans when we would be co-teaching.” The respondent continued with this recommendation: “it would have been more useful to develop lesson plans with our co-instructor, instead of having to merge and blend them together the first day of class.” One respondent shared his dislike for the course’s lack of emphasis on actual teaching. Two other respondents described the quality of course materials and the course curriculum as not beneficial. One respondent noted, “...a lot of the course was review, and for the parts that were new, I think I could have just written a paper based on the book,” and a second respondent identified her readings for the course as unhelpful.

**What students should know before starting their teaching internship.** Respondents provided various suggestions to future students with regard to what they should know before beginning the teaching internship. Mentorship was described as an important area of support for graduate students in counselor education. For those students who can choose the professor with whom they will teach, one respondent underscored the importance of “choosing a professor whose style you value” rather than choosing a particular course only based on interest. Furthermore, it is beneficial to consider “which ‘profs’ were the best teachers” and to “try to incorporate the successful strategies employed by your favorite teachers.” This comment speaks to the importance of faculty modeling effective teaching strategies to teaching interns. Another respondent provided a suggestion that emphasized the value of supervision:

Use your mentor as a sounding board, especially if you have never taught before. Rarely will you be presented with an issue in your class with which your supervisor has not had prior experience. Pay attention to the way effective professors do business.

Structured supervision also was indicated as an important area of interest. For graduate students who might not have a formal teaching supervision experience in place, one respondent advised, “Find out with whom they can consult formally or informally. Do not try to teach in a vacuum, especially if they are new to teaching...form an informal peer supervision group or seek outside supervision from another knowledgeable source.”

In addition, classroom management also was identified as a practical area that graduate students should know before beginning their teaching internship. Responses included dealing with “student issues,” “classroom dynamics,” and engaging “the difficult-to-engage student.” A few respondents commented on the importance of understanding and using effective ways to interact with students. For example, one respondent stated, “make sure you pay attention to how people react to being challenged...or how people go about disagreeing...[since] not everyone responds to criticism or being challenged in the same way.” Another respondent underscored the value of having structure in the classroom, noting: “It is easier to be ruthlessly rigid and demanding at first and then loosen the reins toward the end of the semester than it is to be lax in enforcing grading or class rules and then try to put the hammer down at the end of the semester.” This respondent also recommended that teaching interns “set the tone from the start” of the course.

Finally, a few respondents recommended doctoral students understand the time, dedication, and competence required to develop course materials and integrate technology into the curriculum. For example, one respondent suggested doctoral students should know the “most professional issues relevant to the course; how to develop a syllabus; and how to create assignments that truly measure knowledge gained by students.” One respondent proposed that doctoral students plan “to double their estimated time of preparation and to try to gain competence in the use of technology like ANGEL and WEBCT,” which are computerized course management systems.

**How prepared students felt to teach independently.** Overall, respondents described the teaching internship as an essential component in preparing them to teach independently. Emphasis was placed on the importance of didactic training and the co-teaching experience in addition to teaching assistantship opportunities. One respondent noted, “The teaching internship is so essential for counselor educators...and this means a structured course or practicum beyond just being a teaching assistant!” Co-teaching experiences allowed students to gain knowledge of course material as well as skills to manage the classroom, both of which were invaluable to their training. One respondent noted the value of having a didactic course and teaching internship as part of his training: “I believe that my internship alone did not 100% prepare me to teach independently. I think that internship, the class on college teaching and other co-teaching experiences TOGETHER have helped me feel prepared to teach.” After completing the teaching internship, one person indicated she was hired by her department as an instructor for a master’s level course, which helped her gain additional experience and

earn extra income during her doctoral studies.

## **Discussion**

Findings from Phase 1 of the study show the majority of faculty respondents, all from CACREP-accredited CES programs, focused on training doctoral students to become faculty with particular emphasis on teaching, research, and service. Given that the master's degree is the professional-level degree in counselor education, it seems appropriate that doctoral programs focus on training future faculty to teach. The majority of participants noted they were providing some level of teaching opportunities to CES students even if it was not offered in a formalized and systematic way. Doctoral coordinators for three programs did not respond to this question, and three noted they did not require students to complete any kind of teaching experience despite teaching being noted as an important element of doctoral training in the CACREP standards. Nine programs required students to complete a formal teaching internship, typically co-teaching a master's-level counseling course with a counselor education faculty member, and of those programs eight required students to complete a didactic course on teaching. Additional training experiences offered to CES students included teaching undergraduate or graduate courses independently and leading workshops.

As noted earlier, results from our analysis of the student responses (Phase 2 of the study) provided information on the most and least helpful aspects of the teaching internship and the didactic teaching course, as well as what students should know before starting their teaching internship. Mentorship, support and guidance from faculty and peers, and weekly supervision were helpful aspects of the teaching internship. Teaching supervision that was too intensive and working with weak role models of quality teaching were unhelpful aspects of the teaching internship. Although most respondents found the didactic teaching course to be helpful, a few respondents expressed concern over the heavy focus on developing lesson plans (when they were not teaching a course yet) and the lack of actual teaching experience in the course. As a result, respondents recommended that other students be selective about with whom students complete their teaching internship, focusing on the instructor rather than the course content; make full use of the supervision provided by the faculty mentor as well as peer support; learn good classroom management skills; and be aware of the amount of time and energy required to develop and teach a course. All these recommendations are made possible through a didactic teaching course coupled with hands-on teaching experience.

Students respondents also described how prepared they felt to teach independently. Overall, the teaching internship, beyond being a teaching assistant, was very important in helping them feel prepared to teach independently since respondents learned both how to present content and manage the classroom elements of teaching.

Findings from our study are contrary to Wulff et al. (2004) and Fagan and Suedkamp Wells (2004), who found that doctoral students who wanted to become faculty reported they did not receive adequate orientation, preparation, or training to enter the classroom as teachers. Although the comparative research examined experiences across many disciplines and was not primarily focused on counselors, it is the only literature that could be located relevant to the current topic. It appears that students enrolled in CES programs that include a teaching internship requirement, if not requiring both a didactic course and the internship, felt supported as they learned to teach and believed they were well prepared to teach independently. Wulff et al. also suggested that students engage in teaching experiences that are progressively more challenging, moving from some level of teaching observation or a didactic course to then co-teaching with faculty, and then teaching independently, which happened for a number of the doctoral participants in our CES study.

Our findings support Heppner's (1994) assertion that providing graduate students (five psychology students in this case) with the opportunity to engage in a teaching practicum or internship experience significantly increased their knowledge about teaching as well as teaching self-efficacy. Participants in Heppner's study stated that receiving feedback from faculty co-instructors and peers as well as sharing ideas with their peers was particularly helpful, which is similar to our findings.

## **Limitations and Implications**

As with all research, this study has limitations. Because of the preliminary nature of the study and the relatively low response rate for Phase 1, it is not possible to generalize the findings to all CACREP-accredited CES programs or to all

counselor education doctoral programs. In addition, our findings reflect research institutions that train counselor education doctoral students. Therefore, caution should be used in interpreting our findings. Limitations for Phase 2 could include some degree of researcher bias since the authors initially had a student-professor relationship and worked together in a teaching internship, but we took the steps described above to ensure trustworthiness and attend to potential biases.

Despite these limitations, there are several implications that arise from our findings. First, CES programs would benefit from developing a systematic process for training doctoral students to teach. Having a required process is not only important in terms of meeting the CACREP standards, but also has an important influence on how we train future generations of master's-level counselors. This process could include having students complete a didactic course on teaching, preferably offered within the department, and either simultaneously and sequentially completing a co-teaching internship with a faculty member.

Based on the research and our findings, it seems most effective to have doctoral students select the faculty member with whom they want to co-teach and that they receive consistent supervision. Burke (2001) takes the process even further, recommending that doctoral students complete a year long teaching internship that would include teaching two courses a semester and being involved in departmental meetings where curricular issues are discussed, as well as advising students. For specifics on a model designed to meet the CACREP standards for training counselor education doctoral students on how to teach, see Orr et al. (2008), who developed the collaborative teaching teams (CTT) model to help CES students gain experience and increase their sense of competence in teaching.

During the teaching internship students should be provided with formal opportunities to interact with other doctoral students completing their teaching internship, preferably in a weekly group setting. Again, our findings and existing research support the idea that peer support and critique is as important, if not more important, to doctoral students as they learn to become effective and confident teachers. Respondents benefitted from seeing what their colleagues did in similar teaching situations and imagining how they might handle a challenge that a doctoral peer was facing.

Lastly, counselor education programs can help doctoral students broaden their definition of teaching to include community and conference presentations, workshops, and other public speaking opportunities where CES students can use their counseling and teaching skills to educate others. Teacher training also should include specific content about how to assess and handle classroom situations where students may have committed academic misconduct or may be impaired in some way and what campus resources exist to help faculty and students navigate these challenging situations, including how codes of ethics and university policies and procedures apply in the classroom.

As Heppner and Johnston (1994) stated, "the development of excellent teaching skills involves continuous learning, a lifelong process... Given the complexity of the skills required for outstanding teaching, it is surprising that most faculty members have not had formal training in teaching" (p. 492). By providing the same level of focus and attention to teaching in CES programs that we do to research, we can help future CES faculty increase their level of competence and self-efficacy as counselor educators, thus effecting positive change in the classrooms of counselor education master's programs across the country where our graduates are hired to teach. Our provision of quality and comprehensive doctoral-level education also responds to the call for reform for graduate education, particularly in preparing future faculty members to meet the needs of a changing academy.

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