

Article 52

Assessment of Student Dispositions: The Development and Psychometric Properties of the Professional Disposition Competence Assessment (PDCA)

Curtis M. Garner, Brenda J. Freeman, and Lindsay Lee

Garner, Curtis M., EdD, LCPC, NCC, is professor of Counselor Education at Northwest Nazarene University in Nampa, ID. His current research interests include gatekeeping in counseling and logotherapy.

Freeman, Brenda J., PhD, LCPC, NCC, is a professor of Counseling and Educational Psychology/Cooperative Extension at the University of Nevada, Reno. Her research interests include gatekeeping in counseling and American Indian Alaska Native youth and families.

Lee, Lindsay, MS, LPC, obtained her Master's in Science in Counseling at Northwest Nazarene University in 2014. She currently works with adolescents and youth as a licensed professional counselor in Idaho schools.

Abstract

The purpose of this study was to investigate the development and psychometric properties of the Professional Disposition Competence Assessment (PDCA), a rubric based on the inclusion approach and designed to aid counselor educators in admissions processes, conducting mid-program progress reviews, and monitoring student dispositions throughout the academic program. The authors describe the development, piloting, and revision of the PDCA and report on the establishment of content validity, inter-rater reliability between assessors, and construct validity.

Keywords: gatekeeping, student dispositions, rubric, PDCA, counselors-in-training

Measuring student dispositions is an important aspect of program assessment and, when combined with systematic progress reviews, constitutes an essential step for continuous counselor education program improvement. The 2009 and 2016 standards of the Council for Accreditation of Counseling and Related Educational Programs (CACREP) offer examples of the standards-based movement within counselor education. CACREP, the premier accrediting body for counselor education programs, requires assessment of student dispositions as a necessary component of program and student evaluation in the 2016 standards. As defined by Spurgeon, Gibbons, and Cochran (2012),

dispositions are the “core values, attitudes, behaviors, and beliefs needed to become an effective and competent professional” (p. 97). Because student dispositions are an integral aspect of counseling skills and suitability for field performance, the measurement of dispositions is a natural component of counseling program assessment planning.

The *Code of Ethics* of the American Counseling Association (ACA; 2014) represents another highly influential set of guiding principles for the counseling profession. The *Code of Ethics* addresses several issues related to the assessment of dispositions. According to section F.6.B of the ethics code, counselor supervisors are required to gatekeep and remediate their supervisees. Further, counselor educators are required to state at the beginning of a counselor education training program levels of competency, appraisal methods and timing for both learning and clinical competency (ACA, 2014). Foster and McAdams (2009) expounded upon principles stemming from their experience with the dismissal of a counselor education student and the subsequent lawsuit. These counselor educators emphasized the need for transparency of performance expectations as well as recognition by faculty and students that performance evaluations are fair.

Some academic programs have attempted to evaluate students’ dispositions with formal personality and diagnostic assessments, such as the Minnesota Multiphasic Personality Inventory (MMPI; Marlett, 2008), the 16 Personality Factor Questionnaire (16PF; Utley Buensuceso, 2008) and the Edwards Personal Preference Schedule (EPPS; Demos & Zuwaylif, 1966). This practice, however, has produced contradictory evidence of its effectiveness. Further, exclusion on the basis of mental health is prohibited by the American Disabilities Act, which mandates non-discrimination on the basis of disabilities—including mental health disability (Department of Justice, 2010).

The standards-based education movement has led to increased use of rubrics for assessment as they provide a format for offering specific student feedback, guiding instruction toward expected learning outcomes, describing target levels of behavior, and structuring the evaluation process (Alexander & Praeger, 2009; Panadero & Jonsson, 2013). For example, educators at Purdue developed the Performance of Outreach Skills Evaluation Rubric (POSE) to assess the outreach skills of graduate students in psychology and counseling (Taub, Servaty-Seib, Morris, Prieto-Welch, & Werden, 2011). Psychometric properties were reported for this instrument suggesting that such an approach can produce a reliable and valid method for evaluating student behavior. In a comprehensive review of counselor competence performance assessment instruments, Tate, Bloom, Tassara, and Caperton (2014) recommended the use of validated rubrics for counselor performance assessment. Similarly, although informal dispositional assessment approaches proliferate the field, McAdams, Foster, and Ward (2007) suggested that a structured evaluation protocol that provides specific and objective criteria to evaluate and identify suitability of student behavior is important, urging educators to “provide explicit definitions of acceptable and unacceptable performance” (p. 223).

There are few published counselor-in-training dispositional assessments, and most of the assessments designed for measuring unsuitability in counselors-in-training have been published with limited information on reliability and validity. The heavy ethical weight of using a tool for gatekeeping and student remediation necessitates the importance of good psychometric properties to ensure fair processes for students (Messick, 1980). An example of published dispositional assessments is The Counselor

Characteristic Inventory (Pope, 1996), which assesses the presence of ten personality characteristics of effective counselors. Spurgeon et al. (2012) described a detailed process and a 5-item assessment of dispositional traits. Swank, Lambie, and Witta (2012) developed a tool for measuring counselor competence that includes dispositions primarily related to counseling skills. Frame and Stevens-Smith (1995) provided a 5-point Likert-type instrument tool, the Personal Characteristics Evaluation Form, which includes an outline of defined acceptable nonacademic behavior and works to assess student performance. The Professional Performance Fitness Evaluation (PPFE) evaluates specific behaviors of counselors-in-training on a 4-point scale in five major areas (Lumadue & Duffey, 1999). Of special note, McAdams et al. (2007) reported on their experience in the implementation of a Professional Performance Review Protocol as part of a court case involving student gatekeeping, remediation and eventual dismissal. These authors described their professional performance evaluation, a rubric and essential component of the student review protocol. According to the authors, their program benefitted from implementing the performance evaluation as the court eventually found in favor of the counselor education program. In part, the court supported the counselor education department's handling of the student dismissal because of the faculty's methodical approach to student assessment. The author indicated that they have not established reliability and validity for their evaluation rubric (C. R. McAdams, personal communication, October 23, 2015).

The purpose of this study is to describe in detail the development and psychometric properties of the Professional Disposition Competence Assessment (PDCA), a rubric designed to aid counselor educators in admissions processes, conducting student progress reviews, and monitoring student dispositions throughout the academic program. The rubric approach was selected over a Likert scale or checklist because of the transparency of rubrics for students, the ability to describe and to some extent objectify the target level for each disposition, and the potential for increasing standardization between raters. The intent of the study was threefold: (a) to describe the development of the assessment; (b) to describe the training protocols and results for inter-rater reliability; and (c) to report on construct validity of the PDCA. The value of the study is to contribute to the ongoing discussion of approaches to dispositional measurement and student evaluation, and to explore the initial development and establishment of psychometric properties of the PDCA, a tool for evaluating student dispositions.

Development of the PDCA

Following a protocol delineated by Safrit and Wood (1995), the phases in the development of the PDCA included: (a) establishing the blueprint, (b) designing the items, (c) developing evidence for content validity, (d) piloting the items, (e) analyzing the items, and (f) revising the tool.

Developing the Blueprint

The authors developed the blueprint on the basis of the intended use of the tool. An expert panel of seven counselor educators defined the key use of the tool, which is to assess disposition-related student learning outcomes beginning at the point of admission

and continuing throughout the program at specified intervals. Use of the PDCA for dispositional assessment at gates specified by programs can be especially useful to programs as part of meeting the CACREP 2016 standard requiring student progress reviews. The assessment was designed to measure only dispositions, not skills or knowledge, and the tool is observational and integrated across the curriculum. The overarching goal was to design a brief and transparent tool that students, peers, field site supervisors, and faculty can easily use to evaluate broad dispositions important for assessing student suitability.

Initial Writing of Items

The initial item development process began with a review of the literature from counseling, psychology, social work, and education for approaches to the measurement of suitability for the helping professions (Brewer & Apostol, 1976; Jackson & Thompson, 1971). Brear, Dorrian, and Luscri (2008) summarized the studies on this topic from 1975 to 2007, reporting that some of the most common unsuitable factors were deficits in interpersonal skills, inability to accept influence from supervisors, ethical breaches, issues with boundaries, and inadequate self-awareness. The authors reviewed research on the broad factors of personality associated with positive mental health, academic success, and healthy habits and attitudes across the lifespan (referred to as the Big Five). The association of these characteristics with vocational interest and the prediction of career performance based on the Big Five was also reviewed (Costa & McCrae, 1992). Finally, research on the characteristics of successful learners was considered. Based on the literature review, a panel of seven doctorate-level counselor educators reviewed, revised, and selected 11 rubric items. The original 11 items included conscientiousness; self-awareness and intrapersonal depth; interpersonal skills; professionalism, ethics, legal behavior, and political sense; self-regulation; character, integrity, and academic honesty; critical thinking stage of development; appreciation of learning; spirituality; writing ability; and presentation skills. Following research recommendations on best practices in rubric development (Hanna & Smith, 1998; Herman, Aschbacher, & Winters, 1992; Timmerman, Strickland, Johnson, & Payne, 2011), the panel wrote the scoring rubric to include definitions, hierarchical categories of each trait's level of development containing behavioral descriptions, and delineation of target levels. In addition, items were revised for clarity, bias, and objectivity. Authors made the decision to remove the items for writing ability and presentation skills. The items for writing ability and presentation skills were eliminated as the panel agreed that the two items assessed academic skills rather than dispositions.

Content Validity

Content validity on the dispositional items was established through an extensive review of the literature. The 2009 CACREP standards require that counselor education program assessment include the academic, professional, and personal domains. The nine items were organized into the three domains: academic, professional, and personal. These domains provided structure for the content of the literature review. In addition, the five-factor model of personality provided a useful theoretical framework for investigating the relationship between behaviors, traits, and dispositions (Bartley & Roesch, 2011; Ghaderi & Scott, 2000; Lamers, Westerhof, Kovács, & Bohlmeijer, 2012). Theoretical

relationships between dispositional traits and the academic domain were delineated and integrated into behavioral descriptions of rubric items.

The academic domain includes conscientiousness, critical thinking, and appreciation of learning. Conscientious individuals are socially responsible, disciplined, purposeful, and self-driven (Bogg & Roberts, 2004). They also display strong self-discipline, responsibility, dependability, and excellent help-seeking behaviors, suggesting the ability to learn professional skills from supervisors at an acceptable level of competency (Russell, DuPree, Beggs, Peterson, & Anderson, 2007). Critical thinking includes the deliberate use of skills and strategies such as conceptualizing, applying, analyzing, evaluating, and interpreting to increase the probability of a desirable outcome (Halpern, 1998). Individuals with high levels of critical thinking exhibit flexibility in problem solving and are willing to “abandon nonproductive strategies” (Halpern, 1998, p. 452). Appreciation of learning encompasses the enthusiasm, passion, and dedication that a student brings to the learning process including exhibiting curiosity and openness (Costa & McCrae, 1992). Students who exhibit industriousness through purposeful engagement by speaking up in class and engaging in the discussion of academic concepts are demonstrating this disposition. Openness is associated with creativity, appreciation for the value of evaluation and feedback, willingness to consider new approaches and novel ideas, and the valuing of collaboration (Zhang & Huang, 2001).

The three items selected from the professional domain include interpersonal skills, self-regulation, and professionalism (encompassing ethics). Interpersonal skills include agreeableness, altruism, nurturance, warmth, empathy, genuineness, acceptance, access to and appropriate sharing of feelings, giving and receiving feedback effectively, honesty, and the capacity to establish and maintain relationships (Kerl, Garcia, McCullough, & Maxwell, 2002). The interpersonal skills dimension is described as the capacity to exhibit state extraversion, even if a student has trait introversion. The five-factor personality trait of agreeableness is also relevant to this disposition. An agreeable person is described as having “interpersonal tendencies” that include being sympathetic, being willing to help, and believing that others will be equally helpful (Costa & McCrae, 1992, p. 15). Self-regulation reflects the capacity to cope with stressful situations in an even-tempered fashion. The below target descriptions encapsulating the five-factor trait of neuroticism, include the inability to control personal stress, lack of capacity to control impulsive behavior and negative affect (Costa & McCrae, 1992), excessive emotional reactions that interfere with professional functioning (Russell et al., 2007), problematic mood swings, over-anxiousness, disengagement, suicidality, restrictive nutritional behavior, substance abuse, unresolved grief or trauma, and burnout. The professionalism domain encompasses the ability to acquire and integrate professional ethics and standards into one’s repertoire of professional behavior (Russell et al., 2007). It includes the thoughtful use of communication, knowledge, technical skills, clinical training, emotions, values, and reflections in daily practice (Johnson et al., 2008).

The personal domain on the PDCA incorporates three items: self-awareness, character, and spirituality. Self-awareness encapsulates the capacity for intrapersonal depth, evidenced by openness, self-understanding, non-defensiveness, and consistent commitment to personal growth. This capability manifests in a pattern of intentionally working toward personal growth and the ability to identify and respond to personal limitations and situational impairment. Self-awareness is not merely a “state of

knowing,” but is also a manner of personal development that includes reflecting upon experiences, reflecting on the meaning of experiences, and engaging in an “active process of self-experimentation” (Donati & Watts, 2005, p. 483). Character refers to professional integrity, responsibility, honesty, and an individual’s capacity to maintain trust (Johnson et al., 2008). This strong character grounding is demonstrated through a commitment to and involvement in prevailing values and standards of behavior (Bogg & Roberts, 2004). Examples of below target descriptions of character include antagonism, low levels of agreeableness, skepticisms regarding the intentions of others, and a competitive rather than collaborative focus (Costa & McCrae, 1992). Spirituality encompasses meaningful, goal-directed behavior, a strong sense of self, and a commitment to goals associated with a broader meaning. The definition of the spirituality item was informed by Viktor Frankl’s concept of meaning or purpose, measured by the Purpose-in-Life assessment (Crumbaugh & Maholick, 1969). Frankl contended that the primary motivation of humans was to find meaning and purpose in the activities engaged in as part of the search for meaning. The target level of spirituality describes students’ demonstration of an understanding of the relationship between the skills and competencies gained in their coursework and the broader meaning and purpose of their life and goals. The pursuit of meaning, a distinctly human attribute, reflects an awareness of the spiritual significance of life and the individual’s relationship to broad life meaning. Frankl’s definition was secular, employable regardless of religious attitudes, and focused on the meaning and purpose that define a unique identity for individuals (Crumbaugh & Maholick, 1969). Above target descriptions encompass portions of the Association for Spiritual, Ethical, and Religious Values in Counseling (ASERVIC) spirituality definition, including “...one’s capacity for creativity, growth, and the development of a values system” (ASERVIC, 2013). Below target levels reflect a lack of meaning and purpose that may be associated with existential frustration, boredom, drug addiction, aggressiveness, criminality, and suicidal ideation (Frankl, 2004).

Initial Development, Item Analysis, and Adjustment of the Tool

Mirroring the procedures outlined by Herman et al. (1992), researchers refined the PDCA rubric through field testing of items with prospective counseling student participants. For the field testing procedure, the rubric was used to evaluate program applicants. Seven counselor education faculty members utilized the tool to independently evaluate approximately five participants apiece, of 34 prospective students in one-on-one interviews. Of the 34 prospective students, the average age was 34 with 18.52 % male and 81.48 % female. All applicants were assessed with the initial version of the rubric as well as with other assessment strategies. Other strategies included group interviews, writing samples, role play, and review of undergraduate transcripts. Information from these strategies was combined with the interview experiences of the expert panel to refine the rubric and rubric items. Following the interviews, the panel of seven counselor educators conducted a second round of item revision, clarifying wording, definitions, behavioral examples, and performance level (Hanna & Smith, 1998; Herman et al., 1992). The nine items continued to be organized according to the three domains aligned with 2009 CACREP standards.

Training Protocol and Inter-Rater Reliability

Training is generally understood to be important in establishing accurate scoring of rubric items across raters (Herman et al., 1992). The training protocol for the PDCA, approved by the Human Subjects Internal Review Board, involved a replication of the process used by Timmerman et al. (2011). A total of 43 student applicants for a CACREP-accredited counselor education program voluntarily allowed the videotaping of their admissions interviews for research purposes. As a result of the interview and application process, 35% of the participants were admitted into the counseling education program, and 65% were denied admission. From the 43 tapes, the authors selected 20 videotapes for the study on the basis of clarity of technology and the degree to which the interviewer focused on the PDCA. The 20 participants ranged in age from 22 to 52 years old with a mean of 34.1. The sample consisted of 6 males and 14 females with 80% Caucasian and 20% Hispanic.

In the initial step of the development of a training protocol, the authors selected three tapes representing excellent, average, and poor examples of counseling applicant interviews based upon PDCA scores of the initial interviewer. A panel of seven counselor educators rated the three interviews independently (beginning with excellent, then average and finally, poor) using the PDCA. The initial inter-rater correlations on the items from the three pre-training tapes were positive correlations with low to moderate strength. The panel then discussed the scores and reviewed discrepancies until the raters reached a consensus. To increase the likelihood of consistent interpretation among all raters, the counselor educators were trained in each trait, focusing on behavioral indicators drawn from the content of the interview rather than the use of intuitive judgment. The authors opted to deviate from the training protocol by Timmerman et al. (2011) in two ways: they decided not to use augmentation and they added a “booster” training session. Augmentation (adding a plus or minus to the score) was judged to add too much complexity rather than increasing clarity. Instead, raters were instructed to use the number most closely associated with their score. Because the rating of the tapes took place over several months, a booster training session was added to ensure continued calibration and consistent interpretation. The booster session was composed of asking participants to independently rate one “average” tape. Participants discussed discrepancies, and raters reached a consensus. After booster training, faculty independently rated the remaining interviewee videotapes using the PDCA.

Data analysis was performed using Statistical Package for the Social Sciences (SPSS) software. To determine inter-rater reliability, the authors calculated two-way mixed, average-measures intraclass correlation coefficients (ICCs; Hallgren, 2012) to assess the degree of consistency in ratings for each item on the PDCA. The ICC results, shown in Table 1, were used to consider the inter-rater reliability. The average-measures ICC for the total score was in the excellent range ($ICC = .88$), which indicated that very little measurement error was introduced by coders, and there was a high degree of agreement on the total score of the PDCA. The ICCs for conscientiousness ($ICC = .79$), self-awareness ($ICC = .76$), interpersonal skills ($ICC = .87$), professionalism ($ICC = .80$), self-regulation ($ICC = .78$), critical thinking ($ICC = .75$), and spirituality ($ICC = .85$) were in the excellent range, which indicated that coders had a high degree of agreement. The average-measures ICCs for character ($ICC = .72$) and appreciation of

learning ($ICC = .65$) were in the good range, which indicated that a small amount of measurement error occurred during independent coding of these items.

Table 1

Intraclass correlation coefficients for inter-rater reliability of the PDCA

ICC Group	PDCA Item	Average Measure ICC	95% CI Lower	95% CI Upper	<i>p</i>	Valid Cases
5 Faculty raters	Total Score	.88	.74	.96	.000	13
	Conscientiousness	.79	.57	.91	.000	17
	Self-Awareness	.76	.52	.90	.000	17
	Interpersonal Skills	.87	.73	.95	.000	17
	Professionalism	.80	.58	.92	.000	16
	Self-Regulation	.78	.55	.91	.000	17
	Character	.72	.44	.89	.000	17
	Critical Thinking	.75	.50	.90	.000	17
	Appreciation of Learning	.65	.27	.87	.002	15
	Spirituality	.85	.67	.94	.000	15

Note. CI = confidence interval; ICC = intraclass correlation coefficient

Internal Consistency

The authors chose internal consistency as a method for establishing instrument reliability. To establish internal consistency, faculty supervisors rated 73 master’s students from two CACREP-accredited counselor education programs from the Western United States. Also, 107 students rated themselves, and randomly assigned peers rated 88 students. Student participants were 78% female and 22% male. The participants were predominantly Caucasian with an average age of 32 years. Cronbach’s Alpha for faculty ratings was .939. Cronbach’s Alpha for self-ratings was .816, and Cronbach’s Alpha for peer ratings was .887. An inter-item correlation matrix calculated for each of the three measures revealed that the only item that could be removed to increase the Cronbach’s Alpha was spirituality. However, the degree of improvement was not significant.

Construct Validity

Following the approved human subjects protocol, the data for the study of construct validity was collected from ratings of 107 admitted students, 22% male and 78% female. The mean average age of the students was 32 years. Participation was voluntary, and a masked design was utilized to assure that student scores were confidential. The self- rating of the PDCA and the NEO-FFI (Costa & McCrae, 1992), a

60-item inventory that measures the Big Five major dimensions of normal personality traits in adults, were administered to the counselors-in-training. Each NEO-FFI scale is composed of 12 items, and items are self-rated using a 5-point Likert scale ranging from strongly disagree to strongly agree. It is the short version of the 240-item Revised NEO Personality Inventory (NEO-PI-R). The tool was normed on a stratified sample of the U.S. population in 1995 that included 500 males and 500 females (Botwin, 1995). It is a reliable tool with short-term test-retest reliabilities ranging from .86 to .95 (Botwin, 1995) and three-year test-retest reliabilities of .79 for Conscientiousness and .63 for Agreeableness (Widiger, 1992). Numerous validity studies have been conducted, including studies correlating the NEO-PI with the MMPI, the Personality Research Form (PRF), and the Interpersonal Adjective Scale (IAS-R).

To assess construct validity, a Pearson product-moment correlation was used to test the relationship between the mean scores of the nine items on the PDCA and selected factors of the NEO-FFI. PDCA authors anticipated low, positive correlations between four of the scales on the NEO-FFI and corresponding PDCA items (Conscientiousness/PDCA Conscientiousness; Neuroticism/PDCA Self-Regulation; Extraversion and /PDCA Interpersonal Skills: and Openness/PDCA Self-Awareness). Because some of the constructs are interrelated, correlations between other scales might be expected, such as a correlation between conscientiousness and professionalism. Low, rather than moderate or strong, correlations were expected because the rubric definitions are applied in a counselor education setting and are not perfectly aligned with the NEO-FFI definitions. Because the NEO-FFI Neuroticism subscale measures a negative characteristic and the PDCA items are written in the positive, negative correlations with Neuroticism were expected.

Using an a priori level of significance of .05, the NEO-FFI subscale Conscientiousness, as expected, was significantly correlated with Conscientiousness from the PDCA. ($r = .293$). The NEO-FFI Conscientiousness subscale was also significantly correlated with PDCA Ethics ($r = .296$) and Character ($r = .280$). Also, as predicted, the NEO-FFI subscale Neuroticism, the only negative NEO-FFI trait, was inversely correlated with PDCA Self-Regulation ($r = -.300$). Neuroticism was also inversely correlated with PDCA Interpersonal Skills ($r = -.206$) and PDCA Character ($r = -.309$). The NEO-FFI Extraversion subscale was significantly related to PDCA Interpersonal Skills ($r = .375$). Further, as predicted, the NEO-FFI Openness subscale was positively correlated with PDCA Self-Awareness ($r = .242$). Openness was also positively and significantly related to PDCA Conscientiousness ($r = .250$), PDCA Critical Thinking ($r = .338$), and PDCA Appreciation of Learning ($r = .288$). In general, the low to moderate, statistically significant associations between the NEO-FFI and the PDCA rubric subscales were consistent with researcher predictions suggesting satisfactory construct validity for the PDCA.

Discussion

The establishment of psychometric properties of rubrics is challenging in that dispositional rubric items are global, whereas items on personality tests are discrete. Program assessors often overlook inter-rater reliability of rubrics and other instruments, but standardization is the cornerstone of fairness in the evaluation of students. As noted

by Tate et al. (2014), standardized approaches to direct student assessment are necessary for the aggregation of data. Otherwise, the misuse of rubrics to justify the rater's subjective opinions regarding student dispositions may inappropriately become part of student assessment. In the present study, training of faculty following a recommended protocol increased the inter-rater reliability of the PDCA, leading to more standardization in the use of the rubric. The training and the booster sessions were time-consuming but ultimately led to more meaningful assessment.

The results of the construct validity study found overall positive support for the psychometric properties of the PDCA. The low, positive correlations between NEO-FFI Openness and the PDCA Appreciation of Learning and Critical Thinking scales are congruent with the concept that appreciation of learning and critical thinking require openness to new learning and experiences. The moderate, negative correlation between NEO-FFI Neuroticism and PDCA Self-Regulation support the construct validity because the Self-Regulation item was designed to measure dispositions that are generally opposite of the neuroticism, excepting the below target descriptions. While the positive correlation of the NEO-FFI Conscientiousness scale with the PDCA Conscientiousness item was low and positive as expected, conscientiousness was more highly correlated with two other PDCA items, Professionalism and Character, suggesting that the behaviors described in these scales may overlap in unexpected ways. The results, though encouraging, suggest revision of PDCA items for greater clarity and specificity of behaviors, as well as continued research on concurrent validity using tools other than the NEO-FFI is needed.

Counselor educators may hold two points of view on whether or not (and to what degree) dispositions are innate or acquired. On the one hand, counselor educators who adopt a perspective that dispositions are innate would find the PDCA useful as a screening tool and as a tool to monitor dispositional slippage. On the other hand, counselor educators may forgo a deterministic viewpoint and choose to teach students about the dispositions, require key assignments intentionally addressing dispositions, and integrate the measurement of dispositions into the content standards across the curriculum, thus fostering a climate of student growth and development. The PDCA and other dispositional key assessments could ultimately be used both to assess suitability dispositions and to encourage intentional development of positive dispositions in counseling students.

There are several limitations of this study. Though item development involved a comprehensive review of the literature on gatekeeping, counselor effectiveness, and admission and remediation processes in counselor education programs, there may be dispositional traits that were not included. Initial item development and revision involved the faculty members of one counselor education program, and obtaining input regarding the items, definitions, and criteria from other professionals may strengthen the content validity of the PDCA in future revisions. Further research on the PDCA should include a revision of the tool to clarify overlapping items and provide greater specificity of behaviors to increase the objectivity of the tool. While this study is intended to contribute to the growing body of research on screening, gatekeeping, and dispositions in counseling program assessment, the published research is only beginning to explore this topic.

Overall, the PDCA was developed to assist counselor educators monitor, assess, and evaluate non-academic issues or dispositional issues. These dispositions are considered to be crucial for success as a counselor by CACREP, the primary

accreditation body for counselor education. Responding to calls for a structured evaluation protocol for the evaluation of student dispositions (McAdams et al., 2007), reliability and validity information was presented for the PDCA. Accordingly, the PDCA provides the counselor educator with a tool for investigating a variety of counselor education program outcomes related to dispositions. The PDCA can also be used to investigate, assess, and document screening, gatekeeping, and remediation. The PDCA may be used to determine whether remediation can be effectively utilized by counselor education faculty and supervisors to address counselor-student dispositional issues, and if so, what remediation strategies might work best. Ultimately, the PDCA can be used to meet ethical and standards-based requirements for program and student evaluation. The PDCA holds promise for investigating counselor education programmatic outcomes.

References

- Alexander, C. R., & Praeger, S. (2009, June). *Smoke gets in your eyes: Using rubrics as a tool for building justice into assessment practices*. Paper presented at the Annual Conference of the Australian Teacher Education Association (ATEA), Aldbury. Retrieved from <http://files.eric.ed.gov/fulltext/ED524704.pdf>
- American Counseling Association. (2014). *ACA code of ethics*. Alexandria, VA: Author.
- Association of Spiritual, Ethical, and Religious Values in Counseling (ASERVIC). (2013). *ASERVIC white paper*. Retrieved from <http://www.aservic.org/resources/aservic-white-paper-2/>
- Bartley, C. E., & Roesch, S. C. (2011). Coping with daily stress: The role of conscientiousness. *Personality & Individual Differences, 50*(1), 79–83. doi:10.1016/j.paid.2010.08.027
- Bogg, T., & Roberts, B. W. (2004). Conscientiousness and health-related behaviors: A meta-analysis of the leading behavioral contributors to mortality. *Psychological Bulletin, 130*(6), 887–919. doi:10.1037/0033-2909.130.6.887
- Botwin, M. D. (1995). Review of the NEO Personality Inventory-Revised. In J. C. Conoley & J. C. Impara (Eds.), *The twelfth mental measurements yearbook and tests in print*. Lincoln, NE: Buros Institute of Mental Measurements.
- Brear, P., Dorrian, J., & Luscri, G. (2008). Preparing our future counseling professionals: Gatekeeping and the implications for research. *British Association for Counseling and Psychotherapy, 8*(2), 93–101. doi:10.1080/14733140802007855
- Brewer, B. R., & Apostol, R. A. (1976). Relationships among personality, empathy and counselor effectiveness. *Journal of Teaching & Learning, 2*(2), 7–15.
- Council for Accreditation of Counseling and Related Educational Programs (CACREP). (2009). *2009 standards*. Retrieved from <http://www.cacrep.org/2009standards.html>
- Council for Accreditation of Counseling and Related Educational Programs (CACREP). (2016). *CACREP 2016 standards*. Retrieved from <http://www.cacrep.org/for-programs/2016-cacrep-standards/>
- Costa, P. T., Jr., & McCrae, R. R. (1992). *Revised NEO Personality Inventory (NEO-PI-R) and NEO Five-Factor Inventory (NEO-FFI) Professional Manual*. Odessa, FL: Psychological Assessment Resources.

- Crumbaugh, J. C., & Maholick, L. T. (1969). *Manual of instructions for Purpose-in-Life Test*. Abilene, TX: Viktor Frankl Institute of Logotherapy.
- Demos, G. D., & Zuwaylif, F. H. (1966). Characteristics of effective counselors. *Counselor Education and Supervision*, 5(3), 163–165. doi:10.1002/j.1556-6978.1966.tb02062.x
- Department of Justice, Civil Rights Division. (2010). *Americans with Disabilities Act Title III Regulations: Part 36 Nondiscrimination on the Basis of Disability in Public Accommodations and Commercial Facilities* (CRT Docket No. 106). Retrieved from http://www.ada.gov/regs2010/titleIII_2010/titleIII_2010_regulations.htm
- Donati, M., & Watts, M. (2005). Personal development in counselor training: Towards a clarification of inter-related concepts. *British Journal of Guidance & Counselling*, 33(4), 475–484. doi:10.1080/03069880500327553
- Foster, V. A., & McAdams, C. R. (2009). A framework for creating a climate for transparency for professional performance assessment: Fostering student investment in gatekeeping. *Counselor Education and Supervision*, 48(4), 271–284.
- Frame, M., & Stevens-Smith, P. (1995). Out of harm's way: Enhancing monitoring and dismissal processes in counselor education programs. *Counselor Education and Supervision*, 35(2), 118–129.
- Frankl, V. E. (2004). *On the theory and therapy of mental disorders: An introduction to logotherapy and existential analysis* (James M. Dubois, Trans.). New York, NY: Brunner-Routledge.
- Ghaderi, A., & Scott, B. (2000). The big five and eating disorders: A prospective study in the general population. *European Journal of Personality*, 14(4), 311–323.
- Hallgren, K. A. (2012). Computing inter-rater reliability for observational data: An overview and tutorial. *Tutorials in Quantitative Methods for Psychology*, 8(1), 23–34.
- Halpern, D. F. (1998). Teaching critical thinking for transfer across domains: Dispositions, skills, structure training, and metacognitive monitoring. *American Psychologist*, 53(4), 449–455.
- Hanna, M., & Smith, J. (1998). Using rubrics for documentation of clinical work supervision. *Counselor Education & Supervision*, 37(4), 269–278.
- Herman, J. L., Aschbacher, P. R., & Winters, L. (1992). *A practical guide to alternative assessment*. Alexandria, VA: ASCD.
- Jackson, M., & Thompson, C. L. (1971). Effective counselor: Characteristics and attitudes. *Journal of Counseling Psychology*, 18(3), 249–254. doi:10.1037/h0030862
- Johnson, W. B., Elman, N. S., Forrest, L., Robiner, W. N., Rodolfa, E., & Schaffer, J. B. (2008). Addressing professional competence problems in trainees: Some ethical considerations. *Professional Psychology: Research and Practice*, 39(6), 589–599.
- Kerl, S. B., Garcia, J. L., McCullough, C. S., & Maxwell, M. E. (2002). Systematic evaluation of professional performance: Legally supported procedure and process. *Counselor Education & Supervision*, 41, 321–332.

- Lamers, S. M. A., Westerhof, G. J., Kovács, V., & Bohlmeijer, E. T. (2012). Differential relationships in the association of the big five personality traits with positive mental health and psychopathology. *Journal of Research in Personality, 46*, 517–524. doi:10.1016/j.jrp.2012.05.012
- Lumadue, C. A., & Duffey, T. H. (1999). The role of graduate programs as gatekeepers: A model for evaluating student counselor competence. *Counselor Education & Supervision, 39*(2), 101–109.
- Marlett, K. E. (2008). *Personality characteristics of counseling students at a midwest evangelical seminary as correlates of success, satisfaction, and self-perceived effectiveness*. Available from ProQuest Dissertations and Theses database. (UMI No. 250787676)
- McAdams, C. R., III, Foster, V. A., & Ward, T. J. (2007). Remediation and dismissal policies in counselor education: Lessons learned from a challenge in federal court. *Counselor Education and Supervision, 46*, 212–229.
- Messick, S. (1980). Test validity and the ethics of assessment. *American Psychologist, 35*(11), 1012–1027.
- Panadero, E., & Jonsson, A. (2013). The use of scoring rubrics for formative assessment purposes revisited: A review. *Educational Research Review, 9*, 129–144.
- Pope, V. T. (1996, October). Stable personality characteristics of effective counselors: The counselor characteristic inventory. *Dissertation Abstracts International: Section A, 57*, 1503.
- Russell, C. S., DuPree, W. J., Beggs, M. A., Peterson, C. M., & Anderson, M. P. (2007). Responding to remediation and gatekeeping challenges in supervision. *Journal of Marital and Family Therapy, 33*(2), 227–244.
- Safrit, M. J., & Wood, T. M. (1995). *Introduction to measurement in physical education and exercise science* (3rd ed.). New York, NY: McGraw-Hill.
- Spurgeon, S. L., Gibbons, M. M., & Cochran, J. L. (2012). Creating personal dispositions for a professional counseling program. *Counseling & Values, 57*(1), 96–108.
- Swank, J. M., Lambie, G. W., & Witta, E. L. (2012). An exploratory investigation of the counseling competencies scale: A measure of counseling skills, dispositions, and behaviors. *Counselor Education & Supervision, 51*(3), 189–206. doi:10.1002/j.1556-6978.2012.00014.x
- Tate, K. A., Bloom, M. L., Tassara, M. H., & Caperton, W. (2014). Counselor competence, performance assessment, and program evaluation: Using psychometric instruments. *Measurement and Evaluation in Counseling and Development, 47*(4), 291–306. doi:10.1177/0748175614538063
- Taub, D. J., Servaty-Seib, H. L., Morris, C. A., Prieto-Welch, S. L., & Werden, D. (2011). Developing skills in providing outreach programs: Construction and use of the POSE (Performance of Outreach Skills Evaluation) Rubric. *Counseling Outcome Research and Evaluation, 2*(1), 1–14. doi:10.1177/2150137811401019
- Timmerman, B. E. C., Strickland, D. C., Johnson, R. L., & Payne, J. R. (2011). Development of a ‘universal’ rubric for assessing undergraduates’ scientific reasoning skills using scientific writing. *Assessment & Evaluation in Higher Education, 36*(5), 509–547.

- Utley Buensuceso, J. M. (2008). *The sixteen personality factor questionnaire and ratings of counselor effectiveness*. (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3341140).
- Widiger, T. A. (1992). Review of the NEO Personality Inventory. In J. J. Kramer & J. C. Conoley (Eds.), *The Eleventh Mental Measurements Yearbook and Tests in Print*. Lincoln, NE: Buros Institute of Mental Measurements.
- Zhang, L.-F., & Huang, J. (2001). Thinking styles and the five-factor model of personality. *European Journal of Personality*, 15(6), 465–476. doi:10.1002/per.429

Note: This paper is part of the annual VISTAS project sponsored by the American Counseling Association. Find more information on the project at: <http://www.counseling.org/knowledge-center/vistas>