Title of Funded Project:
Developing a Measure of Intervention Skills in Counselor Education Students using the
Integrated Developmental Model

Rationale of the funded project
One significant problem that continues to exist in the field of clinical supervision is the
lack of psychometrically sound measures for assessing therapist-supervisee competencies (Ellis
& Ladany, 1997). An extensive and critical literature review of supervision assessments by Ellis,
D'Iuso, and Ladany (2008) found only one measurement of counseling competencies for
recommended use, the Evaluation Process within Supervision Inventory (EPSI; Lehrman-
Waterman & Ladany, 2001). Their evaluation found that the EPSI was psychometrically reliable
and valid. However, this EPSI was only recommended for use with clinical and counseling
psychology supervisees. The majority of supervision measures investigated did not follow
modern psychometric procedures and guidelines. Furthermore, most authors of supervisee
competency measures did not provide descriptive data about the cultural diversity of their sample
and conduct psychometric investigations of their measures' scores.
The rationale of our research was to assess the progression of counseling students
throughout their professional and personal development. Specifically, we plan to continue
developing a scale to assess supervisees' development of counseling skill competencies
throughout their practicum experience, the Counseling Intervention Competencies Scale (CISC).
The CISC is intended to assist counselor educators and supervisors in assessing developmentally
appropriate intervention skills among supervisees. The CISC is based on Stoltenberg and
McNeill's (2010) integrated developmental model (IDM) of counselor supervision.
McNeill, Stoltenberg, and Romans (1992) attempted to develop a scale based on IDM.
Initial scale development and validation of the Supervisee Levels Questionnaire-Revised (SLQ-
R) found that the measure had some degree of reliability and validity with the IDM. Limitations
of the scale reported by the authors were the use of self-report of supervisees, lack of reliability
in the dependency-autonomy subscale, and the instruments inability to distinguish between
beginning and intermediate level trainees, represented in the IDM by Level 1 and Level 2. Due to
the promise of the initial instrument and the popularity of developmental models of supervision
(Stoltenberg & McNeill, 2010), we decided that an instrument for measuring this construct may
be useful for clinical supervision. We also decided to focus on investigating the intervention
skills domain of the IDM, as this seems to be a significant focus of beginning level trainees and
therefore may more salient to counselor development in our prospective sample.
The researchers desired to continue developing a scale with the assistance of the SACES
Research Award. Several steps were needed to further develop the CISC. A larger sample was
desired to gain a deeper understanding of the reliability, validity, and relevance of the
assessment. Some questions were found by participants to be unclear; thus, further development
of these items is warranted. Furthermore, using the self-report of supervisee's may not be as
accurate as a supervisor rating them based on direct observation of behavior. Finally, further
development of the instrument is needed to more fully reflect the IDM as intended. A thorough
analysis of the interaction between structures/domains of the IDM would be beneficial, along
with examining if interactions are represented in the assessment. In addition, the IDM has three

core structures, while the original CISC has only represented two. Further item development related to the Motivation structure is needed to more fully capture IDM.

Methodology of the project funded

Instrument Design

In initially redesigning the instrument, the researchers attempted to identify operational definitions of counseling interventions skills according to the IDM (Stoltenberg & McNeill, 2010) by conducting a literature review on previous measures and the theory itself (Lambie, Blount, & Mullen, 2017). A structural framework for the measure was then established utilizing the IDM model, with factors based on developmental level (i.e., Level 1, Level 2) and structure (i.e., self-other awareness, dependency-autonomy, motivation) (Wolfe & Smith, 2007). Items were developed utilizing Kline's (2005) rules for assessment developers. Following a review of the items by a developer of the IDM model, the measure was pretested using the pilot sample. Initial reliability of the scale indicated that the instrument would benefit from further development utilizing a larger, random sample (Lambie et al., 2017).

Data Collection

This study employed a descriptive cross-sectional design that utilized mixed methods survey research data collection methodology (Gall, Gall, & Borg, 2007) that adhered to tailored design methods (Dillman et al., 2007). Each participant was sent three notices that invited them to complete the survey materials online through Qualtrics as well as requesting that they send the survey to one faculty member and one doctoral student if applicable. The first email introduced participants to the study and invited them to complete an online survey. Participants who consented to complete the survey were asked to read a consent form and agree to participate. At this point, participants could also opt out of the study and would no longer receive any invitations to participate. If participants did not opt out of the study or complete the study, they were sent a reminder email three days later. After one week, a second invitation letter was sent. Based on the low response rate following the second and third emails, feedback from the sample, and the conclusion of the academic semester, researchers did not send additional follow up emails.

Analyses and Results

Participants

Participants in this study consisted of clinical supervisors of master's students in counselor education programs, specifically faculty and doctoral students. The researchers first piloted the initial instrument by asking doctoral students in the Counselor Education department at the College of William & Mary to complete the instrument form based on their supervisees. The pilot data was used to further refine the instrument. Researchers then developed a sample that included program heads of CACREP accredited counseling programs whose email was posted on the counseling program's website ($N = 356$). Researchers attempted to elicit a larger sample through snowball sampling by asking program heads to complete the instrument as well as forwarding the instrument to be completed by one other faculty member and one doctoral student if applicable. The sampling methodology resulted in 29 responses from the pilot sample and 34 responses from the second sample.

Analyses

Reliability analysis was performed on scale items in various permutations, using Cronbach's Alpha as a measure of internal consistency. The overall scale had acceptable reliability ($\alpha = .748$, n = 89). In addition to overall reliability, the scale was assessed along its six

sub-scales representing the three IDM structures over two developmental levels. The Level One Self-Other Awareness items had strong reliability (α = .855, n = 15). The Level One Motivation items had below acceptable results (α = .682, n = 15). The Level One Autonomy-Dependency items had strong reliability (α = .804, n = 15). The Level Two Self-Other Awareness items had acceptable reliability (α = .741, n = 15). The Level Two Motivation items had below acceptable results (α = .562, n = 14). The Level Two Autonomy-Dependency items had below acceptable results (α = .654, n = 15). All sub-scales had items indicated that would improve Cronbach's Alpha if removed, but the decision was made to postpone item reduction until a full sample was accessed. However, the initial reliability results were favorable.

Limitations

Although results provide initial support for the measure, a larger random sample is needed to conduct further analyses such as exploratory factor analysis. Reliability analysis provided results ranging from poor (α = .562) to strong (α = .855), with an overall result in the acceptable range (α = .748). The issues of internal reliability may be addressed by further item reduction, but this was not undertaken due to the small sample size and intent to access a larger sample. Our sample was split almost evenly between doctoral students (51.9%) and faculty (46.2%). However, the evaluated supervisees were mostly Clinical Mental Health Counseling students (53.8%), with the next largest group being School Counseling students (23.1%). In addition, evaluated supervisees were primarily in their Practicum phase (63.5%). This may affect the nature of our results, especially related to items representing Level Two counselors. Ideally, further research will have a more balanced sample.

Implications for future research

The researchers have decided to postpone further data collection until September 2018 based on the norm that many counselor education programs do not engage in clinical supervision with master's students over the summer. Researchers are currently building a sample of counselor educators teaching in CACREP accredited programs whose contact information is available online. Researchers plan on extracting a simple random sample of counselor educators based on expected response rate (~16 %) and desired responses to run an exploratory factor analysis on the instrument with a subjects-to-variable ratio of five or greater (n = 300) for a desired total sample size of 1,875. Researchers will then redistribute the survey using tailored design methods (Dillman et al., 2014).

Implications for Counselor Education and/or Supervision

Implications will be posted following the completion of the study.

Plan to Disseminate Findings

The authors of this investigation will seek to disseminate the findings as a research manuscript to be submitted for publication in the *Counselor Education and Supervision* journal. In addition, the authors will submit to present the findings at national and regional counseling and counselor education conferences (e.g., ACA, ASCA, ACES, and SACES).

Final Budget

The final budget will be posted following completion of the study.

Research Report for posting on www.saces.org

Would you be willing to host a SACES webinar related to your research topic?

Yes <u>X</u> No_____

Would you be willing to serve as a mentor to future SACES research grant recipients?

Yes <u>X</u> No_____

Please submit completed reports to miarussi@nova.edu by May 1, 2018

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