

Factors Influencing Trainee Willingness to Disclose in Supervision

Kristin E. Mehr
West Chester University of Pennsylvania

Nicholas Ladany
Santa Clara University

Grace I. L. Caskie
Lehigh University

Structural equation modeling was used to investigate an overarching model of the interrelationships among a combined set of variables (i.e., trainee anxiety, supervisory working alliance, and counseling self-efficacy) related to trainee willingness to disclose in supervision. A modified version of the model satisfied the predetermined criteria for good fit to the observed data. The findings provided further empirical support for the relationships between higher counseling self-efficacy and less trainee anxiety, stronger supervisory working alliance and less trainee anxiety, and stronger supervisory working alliance and higher willingness to disclose. Empirical support was not found for a relationship between trainee anxiety and willingness to disclose or a relationship between counseling self-efficacy and willingness to disclose. Implications for practice and future research directions are discussed.

Keywords: supervision, disclosure, alliance, anxiety, counseling self-efficacy

Supplemental materials: <http://dx.doi.org/10.1037/tep0000028.supp>

The willingness of supervisees to disclose pertinent information to their supervisors plays a primary role in the eventual success of supervision (Ladany, Hill, Corbett, & Nutt, 1996). For instance, disclosure about therapy interactions and supervision experiences must occur for supervisors to foster trainees' professional competence (e.g., Bordin, 1983; Loganbill, Hardy, & Delworth, 1982). Also, for supervisors to monitor client welfare, they must be made aware of clinical issues as well as personal issues that may negatively influence the therapy relationship. The failure of trainees to disclose also impacts the supervisor because he or she could be held responsible for unethical behavior of the trainee (Bernard & Goodyear, 2009).

Existing research has primarily focused on the information that is concealed in the supervisor–trainee relationship in a single session or over the course of the relationship, and these studies have revealed that the content of trainee nondisclosure in supervision typically involves supervision-related issues, clinical issues, and personal concerns (Banks & Ladany, 2006; Hess et al., 2008; Ladany et al., 1996; Mehr, Ladany, & Caskie, 2010; Yourman & Farber, 1996). Although trainees' willingness to disclose has been found to be related to less reported actual nondisclosure (Mehr et al., 2010), the factors that contribute to trainees' willingness to disclose in supervision have remained understudied topics. To that end, we examined a proposed model of the relationships between

This article was published Online First March 24, 2014.

KRISTIN E. MEHR received her PhD in counseling psychology from Lehigh University in 2011. This article was developed from her dissertation project. Currently, she is an assistant professor/psychologist in the Department of Counseling & Psychological Services at West Chester University of Pennsylvania. She has co-authored two other articles in the area of supervision and training, and she has presented at numerous conferences.

NICHOLAS LADANY, PhD, is dean of the School of Education and Counseling Psychology at Santa Clara University in Santa Clara, California. He previously served as director of the counseling program at Loyola Marymount University in Los Angeles, California, program coordinator and director of doctoral training of the counseling psychology program and chair of the Department of Education and Human Services at Lehigh University in Bethlehem, Pennsylvania. Before his affiliation with Lehigh University, he was an assistant professor of counseling psychology at Temple University and a visiting faculty in counseling psychology at the University of Maryland. He received his PhD at the University at Albany, State University of New York, in 1992. He has published numerous articles and presented nationally and internationally in the area of counseling and psychotherapy supervision and training. His primary research interests and

activities include the interrelationships between supervision process and outcome, and counseling and psychotherapy process and outcome, including such issues as the working alliance, self-disclosures and nondisclosures, multicultural training, ethics, and social justice. He has served as an Associate Editor of *Psychotherapy: Theory, Research, Practice, and Training*, has served on the editorial board of the *Journal of Counseling Psychology*, *The Counseling Psychologist*, and *Counselor Education and Supervision*. He has published five books including: *Practicing Counseling and Psychotherapy: Insights from Trainees, Clients, and Supervisors*, *Critical Events in Psychotherapy Supervision: An Interpersonal Approach and Counselor Supervision (4th edition)*.

GRACE I. L. CASKIE received her PhD in quantitative psychology from the University of North Carolina at Chapel Hill and is currently associate professor in the Department of Education and Human Services, Counseling Psychology program at Lehigh University. Her research focuses on quantitative methods as applied to the areas of cognition, health, and functional outcomes across the lifespan.

CORRESPONDENCE CONCERNING THIS ARTICLE should be addressed to Kristin E. Mehr, Department of Counseling & Psychological Services, West Chester University of Pennsylvania, 241 A Lawrence Center, West Chester, PA 19383. E-mail: kmehr@wcupa.edu

trainee level of anxiety, perception of the supervisory alliance, counseling self-efficacy, and willingness to disclose.

Trainee Anxiety

The supervision environment tends to raise anxiety for many trainees, particularly because of the novel situation that supervision offers and the evaluative nature of supervision (Liddle, 1986), the personal and professional importance of supervision (Loganbill et al., 1982), and the inherent role of conflict and ambiguity in supervision (Olk & Friedlander, 1992). In addition to evaluation concerns, anxiety in supervision stems from worries about one's own clinical competence (Liddle, 1986). The management of anxiety is considered a primary task of supervision (Frantz, 1992), particularly because anxiety can interfere with the trainee's learning process in supervision and with the quality of the supervisor–supervisee interactions (Loganbill et al., 1982). Trainee anxiety can affect such interactions through its influence on what the trainee is willing to disclose to the supervisor (Bernard & Goodyear, 2009). For example, an anxious trainee may disclose less, attempt to conceal limitations (Liddle, 1986), and solely discuss positive clinical interactions (Ronnestad & Skovholt, 1993).

Research has found that lower levels of anxiety in a single supervision session were related to higher willingness to disclose in that session (Mehr et al., 2010). In other research, 57% of participants reported that level of worry about making a mistake or being judged was an important contributor to their willingness to disclose clinical mistakes to their supervisors (Walsh, Gillespie, Greer, & Eanes, 2003). Based on existing research, it was hypothesized in the current study that a lower level of trainee anxiety would predict higher willingness to disclose.

Supervisory Working Alliance

The supervisory working alliance correlates with various supervision-related variables and has demonstrated a significant influence on trainee disclosure (e.g., Ladany et al., 1996; Webb & Wheeler, 1998). For instance, a positive relationship has been found between rapport in the supervisory relationship and disclosure of clinical and supervision-related issues (Webb & Wheeler, 1998). A supportive supervisory relationship was also identified as the most salient predictor of willingness to disclose clinical mistakes among pastoral counseling students (Walsh et al., 2003). The supervisor–trainee relationship is often defined in terms of the supervisory working alliance, which encompasses emotional bond and agreement on the tasks and goals of supervision (Bordin, 1983). The importance of the supervisory relationship is further supported by findings that the perception of a stronger alliance relates to higher willingness to disclose in a single supervision session and less anxiety in that session (Mehr et al., 2010).

Based on the existing research (Mehr et al., 2010; Walsh et al., 2003; Webb & Wheeler, 1998), it was proposed in the current study that trainee perception of a stronger supervisory alliance would predict: (a) higher willingness to disclose in supervision and (b) less anxiety. These hypotheses also possess heuristic support. For instance, a trainee who perceives the supervisor as emotionally supportive would likely be inclined to disclose a personal issue impacting clinical work. Additionally, in a relationship with agreement on supervision tasks and goals, a trainee will likely be able

to anticipate what will happen in supervision and thus experience less anxiety.

Counseling Self-Efficacy

Self-efficacy is one's belief in her or his ability to execute actions successfully in a particular domain, and self-efficacy influences one's feelings, thoughts, and behaviors in that domain (Bandura, 1982). Counseling self-efficacy encompasses the counselor's judgments of her or his own ability to perform counseling-related actions (Larson et al., 1992), such as basic helping skills, organizing a counseling session, and handling challenging clinical situations (Lent, Hill, & Hoffman, 2003). Self-efficacy has been investigated as a predictor of both state anxiety (i.e., temporary anxiety in a specific situation) and trait anxiety (i.e., the general tendency to be anxious; Spielberger, Gorsuch, Lushene, Vagg, & Jacobs, 1983). Negative relationships have been found between counseling self-efficacy and state anxiety and counseling self-efficacy and trait anxiety (Larson et al., 1992). Thus, it was hypothesized in the current study that higher levels of counseling self-efficacy would predict lower levels of trainee anxiety in supervision.

Currently, no research exists that either supports or refutes a relationship between counseling self-efficacy and willingness to disclose in supervision. Thus, this study also examined an alternative model, with the additional hypothesis that higher counseling self-efficacy would predict higher willingness to disclose in supervision. Social-cognitive theory (e.g., Bandura, 1997), which proposes that self-efficacy beliefs are a contributing factor to an individual's reaction to threatening events, provides theoretical support for this hypothesis. For example, if a supervisee has committed a clinical error, low self-efficacy may make the supervisee feel less inclined to disclose the mistake to the supervisor. The alternative model allowed us to determine whether the inclusion of this additional relationship enhances model fit, which would provide a better explanation of the factors influencing trainee willingness to disclose in supervision.

Hypotheses

The purpose of the current study was to examine a proposed model of the relationships between trainee anxiety, trainee perception of the supervisory working alliance, counseling self-efficacy, and willingness to disclose in supervision. Four predictive paths were hypothesized:

Path A: Counseling self-efficacy → anxiety. It was hypothesized that higher counseling self-efficacy would predict less anxiety in supervision.

Path B: Supervisory alliance → anxiety. It was hypothesized that perception of a stronger supervisory working alliance would predict less anxiety in supervision.

Path C: Supervisory alliance → willingness to disclose. It was hypothesized that perception of a stronger supervisory working alliance would predict higher willingness to disclose in supervision.

Path D: Anxiety → willingness to disclose. It was hypothesized that lower levels of anxiety in supervision would predict higher willingness to disclose in supervision.

An alternative model was examined that includes Paths A, B, C, and D, as well as Path E.

Path E: Counseling self-efficacy → willingness to disclose. It was hypothesized that trainee’s higher counseling self-efficacy would predict higher willingness to disclose in supervision.

A visual display of the target and alternative models is provided in Figure 1.

Method

Participants

Two hundred one professional psychology doctoral students (171 women, 27 men, 3 unspecified), averaging 29.3 years in age ($SD = 6.7$), provided complete data and, thus, participated in this study. An additional 55 individuals initiated the study, but did not provide complete data and, thus, were not included as participants. Participants identified as White/European American ($n = 165$ [82.1%]), Black/African American ($n = 11$ [5.5%]), American Indian or Alaskan Native (2 [1.0%]), Asian American or Pacific Islander ($n = 6$ [3.0%]), Hispanic/Latino ($n = 4$ [2.0%]), multi-racial ($n = 8$ [4.0%]), and “other” ($n = 4$ [2.0%]). They were

primarily in clinical (56.2%) or counseling (29.4%) psychology programs, and were supervised in college counseling centers (23.9%), hospitals (23.4%), community mental health centers (17.9%), academic departments (15.9%), and private practices (7.5%). They identified as beginning practicum (27.4%), advanced practicum (28.4%), or internship (39.8%), and reported a median of 16 months ($M = 23.3$, $SD = 23.1$) of counseling experience. At the time of the study, they had attended a median of 12 supervision sessions ($M = 23$, $SD = 41.4$) with their current supervisor.

Measures

Demographic questionnaire. A demographic questionnaire was used to obtain information about participants’ age, gender, race, academic program, year in the program, level of clinical experience, months of counseling experience, total number of clients seen, average number of clients seen per month, theoretical orientation, supervision setting, amount of supervision sessions to date, hours of supervision per week, date supervision began, total number of sessions that supervision will meet, time lapsed until

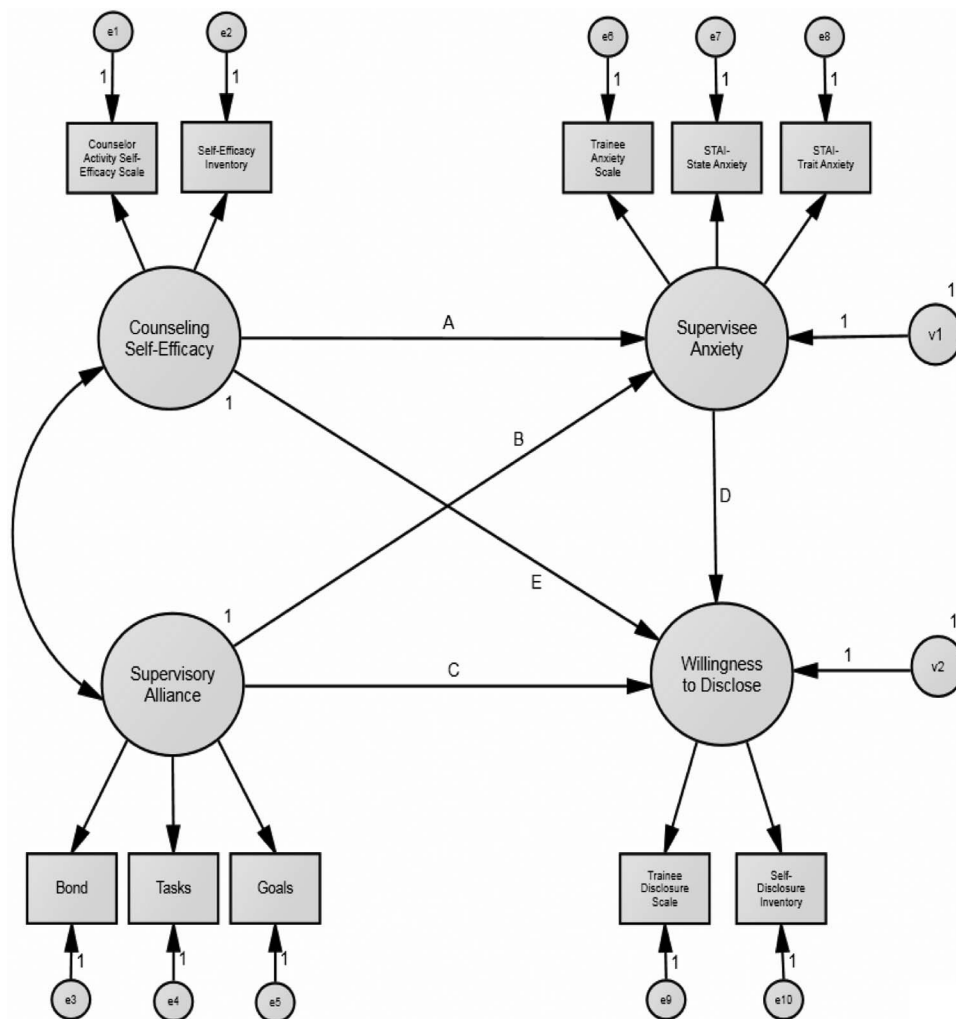


Figure 1. Structural equation model. Note. Path E is included only in the alternative model.

next supervision session, evaluation procedure, taping procedure, supervisor's race, supervisor's gender, and supervisor's employment setting.

Trainee Anxiety Scale. The Trainee Anxiety Scale (TAS; Ladany, Walker, Pate-Carolan, & Evans, 2007) is a 14-item self-report questionnaire used to assess trainee's level of anxiety in supervision. Item responses are on a 7-point Likert scale, ranging from 1 (*not at all true of me*) to 7 (*totally true of me*). A single total score is calculated, with higher scores representing higher levels of anxiety. In the current study, participants were asked to respond as if they were about to have a supervision session with their current supervisor. The TAS has been found to be positively related to the congruency of supervisor–trainee interpersonal response modes (Crall & Ladany, 2007) and negatively related to trainee perceptions of the supervisory working alliance (Mehr et al., 2010). Prior internal consistency estimates for the TAS have been .87 (Crall & Ladany, 2007) and .95 (Mehr et al., 2010). The internal consistency coefficient of the TAS for the current sample was .93.

State–Trait Anxiety Inventory. The State–Trait Anxiety Inventory (STAI; Spielberger et al., 1983) is a 40-item self-report inventory used to assess state and trait anxiety. The STAI State Anxiety Scale (STAI-S) contains 20 items with possible responses on a 4-point Likert-type scale, ranging from 1 (*not at all*) to 4 (*very much so*). The STAI Trait Anxiety Scale (STAI-T) contains 20 items that use a 4-point Likert-type scale, ranging from 1 (*almost never*) to 4 (*almost always*). Higher scores reflect more state and trait anxiety. The STAI-T has been found to correlate highly with existing measures of trait anxiety, and both the STAI-T and the STAI-S have been found to have high correlations with measures of personality attributes that would be expected to be related to anxiety (Spielberger et al., 1983). Averaging the data from various populations, the median internal consistency coefficient was .93 for the STAI-S and .90 for the STAI-T (Spielberger et al., 1983). The internal consistency coefficients of the STAI-S and the STAI-T for the current sample were .93 and .91, respectively.

Working Alliance Inventory/Supervision (Trainee Version). The Working Alliance Inventory/Supervision (WAI/S; Bahrnick, 1989) is a 36-item self-report questionnaire used to assess trainees' perceptions of the supervisory working alliance (i.e., bond, tasks, and goals; Bordin, 1983). The three subscales, which correspond to the factors of the alliance, each contain 12 items. Participants respond to items on a 7-point Likert scale, ranging from 1 (*never*) to 7 (*always*). Higher scores on the subscales reflect perception of higher agreement on the tasks and goals of supervision and a stronger emotional bond with the supervisor. The WAI/S is positively related to trainee satisfaction (Ladany, Ellis, & Friedlander, 1999) and goal setting and feedback processes in supervision (Lehrman-Waterman & Ladany, 2001), and negatively related to trainee role ambiguity and role conflict (Ladany & Friedlander, 1995). Previous internal consistency estimates for the WAI/S exceeded .90 for all subscales (Ladany et al., 1999; Ladany & Friedlander, 1995; Ladany & Lehrman-Waterman, 1999). The internal consistency coefficients for the current sample of the Bond, Tasks, and Goals subscales of the WAI/S were .91, .92, and .93, respectively.

Counseling Activity Self-Efficacy Scales. The Counseling Activity Self-Efficacy Scales (CASES; Lent et al., 2003) is a 41-item self-report questionnaire used to assess counselors' per-

ceptions of their abilities within three “overlapping, yet somewhat distinct” (p. 102) domains: (a) executing basic helping skills (15 items), (b) organizing and managing a counseling session (10 items), and (c) handling difficult clinical situations and client-presenting issues (16 items). Participants respond to items on a 10-point Likert scale, ranging from 0 (*no confidence at all*) to 9 (*complete confidence*). In the current study, the total scale score was calculated, with a higher score representing higher counseling self-efficacy. The total scale score of the CASES correlates highly ($r = .76$) with the total scale score of the Counseling Self-Estimate Inventory (Larson et al., 1992), another measure of counseling self-efficacy (Lent et al., 2003). The internal consistency coefficient for the CASES total scale had been found to be .97 (Lent et al., 2003). The internal consistency coefficient of the CASES for the current sample was .96.

Self-Efficacy Inventory. The Self-Efficacy Inventory (SEI; Friedlander & Snyder, 1983) is a 21-item self-report questionnaire used to assess counseling self-efficacy, measuring confidence in the domains of assessment, individual counseling, group and family intervention, case management, and completion of academic requirements. Participants respond to items on a 5-point Likert scale, ranging from 0 (*not very*) to 9 (*very*). A single total score is calculated, with higher scores signifying higher self-efficacy. The SEI was found to correlate highly ($r = .83$) with the Counselor Self-Efficacy Scale (Melchert, Hays, Wiljanen, & Kolocek, 1996). A previous internal consistency estimate for the SEI was .93 (Friedlander & Snyder, 1983). The internal consistency coefficient of the SEI for the current sample was .91.

Trainee Disclosure Scale. The Trainee Disclosure Scale (TDS; Walker, Ladany, & Pate-Carolan, 2007) is a 13-item self-report questionnaire used in the current study to assess willingness to disclose in supervision in domains such as clinical issues, personal issues, and supervision-related issues. Participants respond to items on a 5-point Likert-type scale, ranging from 1 (*not at all likely*) to 5 (*very likely*). A single total score is calculated, with higher scores signifying higher willingness to disclose. In the current study, participants responded as if they were about to have a session with their current supervisor. The TDS is positively related to supportive gender-related events in supervision (Walker et al., 2007) and perceptions of a strong alliance (Mehr et al., 2010). Previous internal consistency estimates for the TDS were .89 (Walker et al., 2007) and .85 (Mehr et al., 2010). The internal consistency coefficient of the TDS for the current sample was .86.

Self-Disclosure Index. The Self-Disclosure Index (SDI) is a modified version of the Supervisor Self-Disclosure Index (SSDI; Ladany & Lehrman-Waterman, 1999), a nine-item questionnaire that assesses trainee perceptions of supervisor self-disclosure in domains such as clinical experiences, supervision experiences, and personal information. Participants respond to items on a 5-point Likert-type scale, ranging from 1 (*not at all*) to 5 (*often*). A single total score is calculated, with higher scores signifying higher self-disclosure. In the current study, the SSDI was modified to assess trainees' own disclosure in supervision. Scores on the SSDI have been positively related to a stronger working alliance (Ladany & Lehrman-Waterman, 1999), but no validity information is available for the SDI because this modified measure has only been used in the current study. A prior internal consistency estimate of the SSDI was .88 (Ladany & Lehrman-Waterman, 1999).

The internal consistency coefficient of the SDI for the current sample was .86.

Procedure

Participants were recruited through e-mail contact with directors of programs in counseling psychology and clinical psychology accredited with the American Psychological Association (APA), as well as training directors of APA-accredited internship sites found on the Association of Psychology Postdoctoral and Internship Center website. Directors were solicited to distribute an initial e-mail and follow-up notification to trainees that included a link to the online questionnaire. The cover letter instructed participants to complete the questionnaire as it related to their current supervision experience with their primary supervisor. Confidentiality, informed consent, anonymity, potential benefits and risks, and the right to withdraw at any time were detailed. Participants who completed the study had the option of entering a raffle for a \$25 gift certificate to Barnes & Noble or choosing from two charities (Susan G. Komen for the Cure and Autism Speaks) to receive a \$1 donation from the researcher. The incentive groups did not differ significantly on the primary variables. The study was granted approval by the Institutional Review Board of Lehigh University.

Data Analysis

Structural equation modeling (SEM), with AMOS, Version 18.0, software (Arbuckle, 2009) was used to examine how well the proposed target and alternative models fit the sample data. To assess model fit, several fit indices were examined, including the chi-square (and associated degrees of freedom), the root mean square error of approximation (RMSEA), goodness-of-fit index (GFI), comparative fit index (CFI), and Tucker–Lewis index (TLI). The recommendations specific to counseling psychology research for studies with sample sizes that are smaller than 500 were used: a value of .90 or greater for the GFI, CFI, and TLI and a value of .10 or less for the RMSEA (Weston & Gore, 2006). In our study, conclusions of good fit between the hypothesized models and the observed data were determined by satisfying three of these criteria.

Results

Due to space limitations, readers may access additional statistical information within the online supplemental materials. Information about preliminary analyses, the prerequisites of SEM (e.g., establishing multivariate normality and model identification), and the means, standard deviations, and correlations of the primary variables (see online supplemental Table S1), as well as the unstandardized and standardized results of the target and alternative models (see online supplemental Table S2) may be viewed in the supplemental materials.

Target Model

All indicators loaded significantly on their respective latent variables ($p < .001$). The results indicate that trainee perceptions of a strong alliance significantly predicted lower levels of supervisee anxiety ($\beta = -.52, p < .001$), higher counseling self-efficacy significantly predicted less supervisee anxiety

($\beta = -.36, p < .001$), and perceptions of a strong alliance significantly predicted higher willingness to disclose ($\beta = .46, p < .001$). However, anxiety was not a significant predictor of willingness to disclose ($\beta = -.18, p = .126$). The target model did not meet the criteria established a priori for good fit, $\chi^2(30) = 118.999, p < .001$; GFI = .903; TLI = .889; CFI = .926; RMSEA = .122. Modification indices included the recommendation of a covariance between the error terms of STAI-S and STAI-T. Because the items of these two subscales of the STAI measure have considerable overlap in item content, use the same rating scale format (i.e., a 4-point Likert response), and rely on self-report, a covariance between the error terms was justified to capture this shared method variance (Cole, Ciesla, & Steiger, 2007; Quintana & Maxwell, 1999). The modified model demonstrated significantly improved fit over the target model, $\Delta\chi^2(1) = 21.583, p < .001$, and it met the specified criteria for good fit, $\chi^2(29) = 97.416, p < .001$; GFI = .922; TLI = .912; CFI = .943; RMSEA = .109.

Alternative Model

Within this model, all factor loadings were again significant, and the four directional paths shared between the target model and the alternative model showed the same patterns of significance. However, counseling self-efficacy was not significantly related to trainee willingness to disclose ($p = .070$). The alternative model did not meet the criteria for good fit, $\chi^2(29) = 115.561, p < .001$; GFI = .902; TLI = .889; CFI = .928; RMSEA = .122. Moreover, including the path between counseling self-efficacy and willingness to disclose did not significantly improve model fit over the target model, $\Delta\chi^2(1) = 3.439, p = .064$. Modification indices again suggested a covariance between STAI-S and STAI-T error terms, which significantly improved fit over the initial alternative model, $\Delta\chi^2(1) = 21.761, p < .001$. This modified alternative model met the criteria for good fit, $\chi^2(28) = 93.798, p < .001$; GFI = .922; TLI = .912; CFI = .946; RMSEA = .108, though did not demonstrate significantly improved fit over the modified target model, $\Delta\chi^2(1) = 3.618, p = .057$.

Model Conclusions

Neither the initial target nor alternative models demonstrated good fit to the data using the specified cutoff values, but the modified target and alternative models that each added one covariance between measurement error terms both met the criteria for good fit and demonstrated significantly improved fit over the initial target and alternative models, respectively. The modified models had nearly identical fit indices to each other. However, the modified alternative model did not demonstrate significantly improved fit over the modified target model, and included a relationship not yet established in the literature. Thus, we conclude that the best-fitting model (see online supplemental Figure S2 and Table S3) is the target model with the modification of including a covariance between the error terms of STAI-S and STAI-T.

Discussion

Hypotheses

Although the relationships in the model have been examined in existing research, the current study was unique in that SEM pro-

vided information on the overall fit of the model *and* the specific relationships between variables. The following hypotheses were supported: (a) higher counseling self-efficacy would predict less anxiety in supervision, (b) trainee perception of a stronger supervisory working alliance would predict less anxiety in supervision, and (c) perception of a stronger alliance would predict higher willingness to disclose. Two hypotheses (i.e., lower levels of anxiety would predict higher willingness to disclose and higher counseling self-efficacy would predict higher willingness to disclose) were not supported.

Trainee Anxiety

Despite theoretical (Liddle, 1986) and empirical (Mehr et al., 2010; Walsh et al., 2003) support for the hypothesized negative relationship between anxiety and disclosure, anxiety was not a significant predictor of willingness to disclose. However, the relationship appears to be approaching significance within the modified target model ($p = .155$). Thus, it is possible that use of a larger sample size would have enabled a significant relationship between these variables to be revealed. In addition, although the STAI-T measure of trait anxiety was a significant indicator of the supervisee anxiety latent variable, this measure did not have a significant correlation with either of the disclosure measures. Examination of the bivariate scatterplots revealed a few individuals with high trait anxiety and high willingness to disclose, which may have influenced the bivariate relationship between these variables. However, a strength of the SEM approach is that relationships are examined between latent constructs as a composite of their indicators to obtain a more complex understanding than is possible with the correlations between individual measures (Schumacker & Lomax, 2010).

In future research, it may be helpful to consider how the specific supervisory relationship influences the context or source of trainee anxiety. For instance, although certain intrapersonal variables would be expected to contribute to trainee anxiety (and by extension disclosure) with any supervisor, interpersonal variables unique to the specific supervisory relationship likely contribute in varied ways. As an example, the experience of feeling silenced, oppressed, or judged within a particular relationship would likely generate a level of trainee anxiety that would minimize the likelihood of disclosure in that relationship, as well as reduce the odds of disclosure through its influence on the supervisory alliance. These relationships would be of particular interest to study with trainees from socially oppressed or marginalized groups.

Supervisory Working Alliance

The findings concur with prior research findings that the supervisory relationship has an influence on trainee disclosure (e.g., Ladany et al., 1996; Mehr et al., 2010; Webb & Wheeler, 1998) and offer additional support for a relationship between the alliance and trainee anxiety in supervision (Mehr et al., 2010). Overall, the results further validate the assertion that the supervisory alliance is a fundamental component of supervision (Ladany, Friedlander, & Nelson, 2005). These findings add to the extensive literature that exists regarding the central role of the alliance in supervision, as evidenced by its relationship with a myriad of other supervision-related variables (e.g., Ladany, Walker, & Melincoff, 2001;

Ladany & Lehrman-Waterman, 1999; Ladany et al., 1999; Lehrman-Waterman & Ladany, 2001; Ladany & Friedlander, 1995), and fit supervision theories (e.g., Ladany et al., 2005; Stoltenberg, McNeill, & Delworth, 1998), which emphasize the alliance as a vital aspect of effective supervision.

Counseling Self-Efficacy

The findings that higher counseling self-efficacy is predictive of less anxiety in supervision are consistent with existing research (Larson et al., 1992) and provide further support for social-cognitive theory (Bandura, 1997). However, the results did not support the additional hypothesized relationship (counseling self-efficacy \rightarrow willingness to disclose) of the alternative model. The relationship appears to be approaching significance, and it is possible that use of a larger sample size might have permitted a significant relationship to have been revealed.

Building on the Model

Though some nondisclosure is expected in supervision, the disclosure process is influenced by various individual and contextual factors (Farber, 2006). The variables in this study were deemed priorities for investigation, but further consideration into additional variables in the context of the current model is warranted. For instance, based on existing research, the case could be made for inclusion in the model of supervisor style as a predictor of trainee perceptions of the alliance (Ladany et al., 2001), supervisor self-disclosure (Ladany et al., 2001; Ladany & Lehrman-Waterman, 1999), and trainee willingness to disclose (Ladany et al., 1996). Additionally, existing research would also support the inclusion of supervisor self-disclosure as a predictor of the alliance (Ladany & Lehrman-Waterman, 1999) and willingness to disclose (Adair, 1999). Finally, prior research would support trainee satisfaction as fitting in the model as a predictor of willingness to disclose (Ladany et al., 1996) and predicted by the alliance (Ladany et al., 1996; Ladany et al., 1999) and supervisor style (Fernando & Hulse-Killacky, 2005).

Study Limitations

The sample acquired in this study was predominantly female (85%), young ($M = 29$ years), and White (82%) and, therefore, there may be limited generalizability to men, older trainees, and trainees from racial and ethnic minority groups. Additionally, individuals self-selected to participate in this study, and volunteers may not be fully representative of trainees in general. Furthermore, due to the data collection methodology, response rates could not be calculated. Although e-mail solicitations were sent to all directors of APA-accredited doctoral programs in professional psychology and all training directors of APA-accredited internship sites, we do not know how many and which directors actually forwarded the solicitation. Thus, we also do not know how many professional psychology doctoral students were provided with the opportunity to choose to participate in the study. For these reasons, caution should be exercised in terms of representativeness of the sample and the degree to which the findings can be generalized to the overall population of professional psychology doctoral students.

Another limitation is that participants were asked to anticipate their feelings of anxiety and their likelihood of disclosure *as if* they

were about to attend a supervision session, but participants reported a median time lapse of 6 days ($M = 5.27$) until their next session. Thus, their responses may not have been as accurate as they would have been had they actually had a session immediately after the survey. In the future, it might be beneficial to request participants to complete the survey directly before entering their next supervision session.

A final limitation to this study is related to the self-report nature of the measures used in this study. For instance, the measures we used assessed willingness to disclose from the self-reported perspective of the trainee. No studies to date have examined the correlation between self-reported disclosure and actual disclosure in supervision; thus, it is unknown whether self-report is an accurate reflection of the contents of the actual supervision session.

Implications for the Field

The findings of this study suggest that a supervision environment ripe for trainee disclosure would be one in which the trainee perceives a strong supervisory alliance. In addition, when trainees perceive a strong alliance, they will experience less anxiety related to supervision. Trainees with higher counseling self-efficacy will also experience less anxiety related to supervision. Though not fully supported by the findings, we might also argue that the experience of a level of anxiety that is not excessive will promote trainee disclosure. So, what can the supervisor do to create such an environment?

First, the supervisor should actively attend to developing a strong alliance with the trainee through behaviors (e.g., empathy, respect, collegiality) that demonstrate the desire for an emotional connection, as well as behaviors (e.g., open discussion, encouraging trainee initiative) that demonstrate a clear interest in reaching agreement on supervision tasks and goals. Another suggestion would be to use supervision as an opportunity to promote the growth of trainee self-efficacy by such activities as promoting trainee self-supervision, identifying and working from trainee's goals, and using direct observation (e.g., audio or videotaping) to identify strengths and areas of growth. After all, developing confidence in one's abilities is a fundamental goal of professional training (Bernard & Goodyear, 2009). A third recommendation would be to openly discuss aspects of supervision (e.g., evaluative component, power differential) that are anxiety-provoking and actively work to assuage trainee worries. Overall, through the active and intentional creation of an open and supportive environment, supervisors will promote the disclosure of important and relevant information in supervision.

References

Adair, S. L. (1999). *Supervisor self-disclosure as a predictor of supervisee self-disclosure, satisfaction with supervision, and perceptions of supervisor credibility* (Unpublished doctoral dissertation). University of Southern California, Los Angeles, CA.

Arbuckle, J. L. (2009). *Amos (Version 18.0)* [Computer software]. Chicago, IL: SPSS.

Bahrck, A. S. (1989). *Role induction for counselor trainees: Effect on the supervisory working alliance* (Unpublished doctoral dissertation). The Ohio State University, Columbus, OH.

Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist, 37*, 122–147. doi:10.1037/0003-066X.37.2.122

Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York, NY: Freeman.

Banks, S., & Ladany, N. (2006). *Covert processes in the supervisory relationship: A longitudinal study of supervisor and trainee nondisclosures*. Unpublished manuscript, Lehigh University, Bethlehem, PA.

Bernard, J. M., & Goodyear, R. K. (2009). *Fundamentals of clinical supervision* (4th ed.). Boston, MA: Pearson Education.

Bordin, E. S. (1983). A working alliance based model of supervision. *The Counseling Psychologist, 11*, 35–42. doi:10.1177/0011000083111007

Cole, D. A., Ciesla, J. A., & Steiger, J. H. (2007). The insidious effects of failing to include design-driven correlated residuals in latent-variable covariance structure analysis. *Psychological Methods, 12*, 381–398. doi:10.1037/1082-989X.12.4.381

Crall, J., & Ladany, N. (2007). *Interpersonal response modes in supervision*. Unpublished manuscript, Lehigh University, Bethlehem, PA.

Farber, B. A. (2006). *Self-disclosure in psychotherapy*. New York, NY: Guilford Press.

Fernando, D. M., & Hulse-Killacky, D. (2005). The relationship of supervisory styles to satisfaction with supervision and the perceived self-efficacy of master's-level counseling students. *Counselor Education and Supervision, 44*, 293–304. doi:10.1002/j.1556-6978.2005.tb01757.x

Frantz, T. G. (1992). Learning from anxiety: A transtheoretical dimension of supervision and its administration. *The Clinical Supervisor, 10*, 29–55. doi:10.1300/J001v10n02_03

Friedlander, M. L., & Snyder, J. (1983). Trainees' expectations for the supervisory process: Testing a developmental model. *Counselor Education and Supervision, 22*, 342–348. doi:10.1002/j.1556-6978.1983.tb01771.x

Hess, S. A., Knox, S., Schultz, J. M., Hill, C. E., Sloan, L., Brandt, S., . . . Hoffman, M. A. (2008). Predoctoral interns' nondisclosure in supervision. *Psychotherapy Research, 18*, 400–411. doi:10.1080/10503300701697505

Ladany, N., Ellis, M., & Friedlander, M. L. (1999). The supervisory working alliance, trainee self-efficacy, and satisfaction. *Journal of Counseling & Development, 77*, 447–455. doi:10.1002/j.1556-6676.1999.tb02472.x

Ladany, N., & Friedlander, M. L. (1995). The relationship between the supervisory working alliance and trainees' experience of role conflict and role ambiguity. *Counselor Education and Supervision, 34*, 220–231. doi:10.1002/j.1556-6978.1995.tb00244.x

Ladany, N., Friedlander, M. L., & Nelson, M. L. (2005). *Critical events in psychotherapy supervision: An interpersonal approach*. Washington, DC: American Psychological Association. doi:10.1037/10958-000

Ladany, N., Hill, C. E., Corbett, M. M., & Nutt, E. A. (1996). Nature, extent, and importance of what psychotherapy trainees do not disclose to their supervisors. *Journal of Counseling Psychology, 43*, 10–24. doi:10.1037/0022-0167.43.1.10

Ladany, N., & Lehrman-Waterman, D. (1999). The content and frequency of supervisor self-disclosures and their relationship to supervisor style and the supervisory working alliance. *Counselor Education and Supervision, 38*, 143–160. doi:10.1002/j.1556-6978.1999.tb00567.x

Ladany, N., Walker, J. A., & Melincoff, D. S. (2001). Supervisory style: Its relation to the supervisory working alliance and supervisor self-disclosure. *Counselor Education and Supervision, 40*, 263–275. doi:10.1002/j.1556-6978.2001.tb01259.x

Ladany, N., Walker, J. A., Pate-Carolan, L., & Evans, L. G. (2007). *Practicing counseling and psychotherapy: Insights from trainees, supervisors, and clients*. London, England: Routledge.

Larson, L. M., Suzuki, L. A., Gillespie, K. N., Potenza, M. T., Bechtel, M. A., & Toulouse, A. L. (1992). Development and validation of the counseling self-estimate inventory. *Journal of Counseling Psychology, 39*, 105–120. doi:10.1037/0022-0167.39.1.105

Lehrman-Waterman, D. E., & Ladany, N. (2001). Development and validation of the Evaluation Process within Supervision Inventory. *Journal*

- of *Counseling Psychology*, 48, 168–177. doi:10.1037/0022-0167.48.2.168
- Lent, R. W., Hill, C. E., & Hoffman, M. A. (2003). Development and validation of the Counselor Activity Self-Efficacy Scales. *Journal of Counseling Psychology*, 50, 97–108. doi:10.1037/0022-0167.50.1.97
- Liddle, B. J. (1986). Resistance in supervision: A response to perceived threat. *Counselor Education and Supervision*, 26, 117–127. doi:10.1002/j.1556-6978.1986.tb00706.x
- Loganbill, C., Hardy, E., & Delworth, U. (1982). Supervision: A conceptual model. *The Counseling Psychologist*, 10, 3–42. doi:10.1177/0011000082101002
- Mehr, K. E., Ladany, N., & Caskie, G. I. L. (2010). Trainee nondisclosure in supervision: What are they not telling you? *Counselling & Psychotherapy Research*, 10, 103–113. doi:10.1080/14733141003712301
- Melchert, T. P., Hays, V. L., Wiljanen, L. M., & Kolocek, A. K. (1996). Testing models of counselor development with a measure of counseling self-efficacy. *Journal of Counseling & Development*, 74, 640–644. doi:10.1002/j.1556-6676.1996.tb02304.x
- Olk, M. E., & Friedlander, M. L. (1992). Trainees' experiences of role conflict and role ambiguity in supervisory relationships. *Journal of Counseling Psychology*, 39, 389–397. doi:10.1037/0022-0167.39.3.389
- Quintana, S. M., & Maxwell, S. E. (1999). Implications of recent developments in structural equation modeling for counseling psychology. *The Counseling Psychologist*, 27, 485–527. doi:10.1177/0011000099274002
- Rønnestad, M. H., & Skovholt, T. M. (1993). Supervision of beginning and advanced graduate students of counseling and psychotherapy. *Journal of Counseling & Development*, 71, 396–405. doi:10.1002/j.1556-6676.1993.tb02655.x
- Schumacker, R. E., & Lomax, R. G. (2010). *A beginner's guide to structural equation modeling* (3rd ed.). New York, NY: Routledge.
- Spielberger, C. D., Gorsuch, R. L., Lushene, R. E., Vagg, P. R., & Jacobs, G. A. (1983). *Manual for the State-Trait Anxiety Inventory*. Palo Alto, CA: Consulting Psychologists Press.
- Stoltenberg, C. D., McNeill, B. W., & Delworth, U. (1998). *IDM: An integrated developmental model for supervising counselors and therapists*. San Francisco, CA: Jossey-Bass.
- Walker, J. A., Ladany, N., & Pate-Carolan, L. M. (2007). Gender-related events in psychotherapy supervision: Female trainee perspectives. *Counseling & Psychotherapy Research*, 7, 12–18. doi:10.1080/14733140601140881
- Walsh, B. B., Gillespie, C. K., Greer, J. M., & Eanes, B. E. (2003). Influence of dyadic mutuality on counselor trainee willingness to self-disclose clinical mistakes to supervisors. *The Clinical Supervisor*, 21, 83–98. doi:10.1300/J001v21n02_06
- Webb, A., & Wheeler, S. (1998). How honest do counsellors dare to be in the supervisory relationships?: An exploratory study. *British Journal of Guidance & Counselling*, 26, 509–524. doi:10.1080/03069889800760431
- Weston, R., & Gore, P. A., Jr. (2006). A brief guide to structural equation modeling. *The Counseling Psychologist*, 34, 719–751. doi:10.1177/0011000006286345
- Yourman, D. B., & Farber, B. A. (1996). Nondisclosure and distortion in psychotherapy supervision. *Psychotherapy: Theory, Research, Practice, Training*, 33, 567–575. doi:10.1037/0033-3204.33.4.567

Received February 25, 2013

Revision received September 24, 2013

Accepted October 15, 2013 ■