Assessment of Supervisee Developmental Level and Supervision Environment Across Supervisor Experience

Jean Chagnon and Richard K. Russell

Supervisors representing different levels of experience viewed videotape vignettes of counselors demonstrating the first three developmental levels of Stoltenberg's (1981) Counselor Complexity Model. Supervisors assessed each counselor on his or her developmental level and on the supervision environment he or she would provide for the trainee. Results indicated that supervisor experience did not influence the assessment of developmental level or the ability to make accurate environmental matches. Nevertheless, supervisors had the most difficulty accurately assessing counselors representing Level 2 in Stoltenberg's model and tended to make relative judgments about counselor developmental level. Implications for training and further research are discussed.

Although developmental models of supervision have been in existence since Hogan's (1964) conceptualization, the last 10 years have witnessed a dramatic increase in theoretical writings from the developmental perspective. The early works of Littrell, Lee-Borden, and Lorenz (1979), Loganbill, Hardy, and Delworth (1982), and Stoltenberg (1981), provided the impetus for the creation of both new models of supervision (e.g., Johnson & Moses, 1988) and revisions of existing theories (e.g., Stoltenberg & Delworth, 1987). By the mid-1980s, Worthington (1984) had noted the existence of 12 developmental models of supervision, a figure that rose to an estimated 25 just 4 years later (Goodyear, 1988). The expansion of theoretical models led Holloway (1987) to conclude that the developmental perspective represents the "zeitgeist of supervision thinking and research" (p. 209).

Unfortunately, the creativity and energy directed toward the formulation of developmental models of supervision have not been matched by equivalent efforts to test these theories empirically. Ellis (1991), in a critique of supervision research, noted that much of this research has been methodologically flawed and has failed to empirically test or verify most supervision models. Borders (1989) also was critical of the proliferation of developmental models of supervision, calling for a "moratorium" on additional theoretical writing. Both Ellis (1991) and Borders (1989) cited the need for renewed research efforts directed toward empirically evaluating the assumptions or premises of existing models of supervision, as opposed to additional theoretical speculation.

One developmental theory that has received considerable attention is Stoltenberg's (1981) Counselor Complexity Model. Drawing on the work of Hogan (1964) and Hurt (1971), Stoltenberg (1981) proposed that counselors move through four levels as they develop from beginning to "master" counselors. In addition, Stoltenberg noted that as counselors move across developmental levels, supervisory environments should adapt to effectively meet the changing needs of the supervisee. According to the Counselor Complexity Model, Level 1 counselors are seen as highly motivated, yet dependent, uninsightful, and insecure, and they require a supervisory environment that emphasizes structure, teaching, and support. Level 2 counselors are characterized as striving for independence and experiencing fluctuating motivation, and as needing a supervisory environment that is low in normative structure yet high in support. In Level 3, counselors are seen as experiencing increased insight and an early personal-counselor identity while requiring a supervisory environment that encourages autonomy, sharing, and confrontation. Level 4 counselors are described as master counselors, capable of independent practice and requiring collegial supervision on an as-needed basis.

Stoltenberg's (1981) model is typical of most developmental theories of supervision, which operate on the basis of two fundamental assertions, although the degree to which these are made explicit and have been empirically tested varies. The first assertion states that supervisees move through a series of qualitatively different stages in the process of becoming effective counselors. The second assertion posits that different levels of supervisee development require qualitatively different supervisory environments. Ideally, these environments become "matched" to the developmental level of the supervisee, thus providing for greater trainee growth and satisfaction.

Several authors have investigated the matching hypothesis of the second assertion by examining the relationship between supervisee developmental level and the accompanying supervision environment. Cross and Brown (1983) reported that beginning supervisees perceived supervision to be more task-oriented, whereas experienced trainees saw it as more interpersonally focused. In a study using supervisors as participants, Miars et al. (1983) found that experienced supervisors reported providing advanced supervisees with an increased emphasis on personal development issues when compared with supervision with beginning supervisees. Wiley and Ray (1986) also studied the relationship between supervisee level and supervision environment, reporting that most supervisees were perceived to be in congruent environments, although outcome measures of satisfaction and perceived learning were not related to congruence. Finally, Krause and Allen (1988), in a survey of both supervisors and supervisees, reported that supervisors believed they varied supervisory behaviors across supervisee developmental level, with advanced supervisees receiving a less structured, more collegial environment. Interestingly, supervisees in the study did not perceive differences in supervisory behavior across the various developmental levels.

Inherent in the ability of supervisors to match supervision environments to supervisee developmental level is the belief that supervisors are able to assess the developmental level of their supervisees

accurately. If it can be demonstrated that supervisors are able to accurately assess supervisee level, the issue then becomes whether they also are able to provide an optimal supervisory environment. Obviously, if supervisors are not able to make accurate judgments about supervisee developmental level, the question of an appropriate environmental match becomes secondary.

This study was designed to evaluate the developmental assessment abilities of supervisors. Specifically, the purpose of this investigation was twofold: (a) to evaluate the ability of supervisors to assess supervisee developmental level accurately, and (b) to determine whether supervisors recommend supervisory environments that match their assessment of supervisee developmental level. Supervisors representing three different levels of supervision experience served as participants to examine for possible effects of experience on the assessment and environmental match process.

METHOD

Overview

This investigation was an analogue study comparing supervisors with different amounts of experience on their ability to assess counselors representing three developmental levels. Supervisors were divided into no-, low-, or high-experience groups on the basis of their prior supervision experience. All supervisors observed three videotaped client–counselor interactions in which the counselors exhibited behaviors characteristic of the first three levels of Stoltenberg's (1981) developmental model. Supervisors then were asked to rate both the developmental level of the counselor and the supervision environment they would provide for that counselor.

Participants

A total of 48 participants served as supervisors in the study, 21 men and 27 women. The no-experience supervisors (n = 17) were first-year graduate students in a counseling psychology doctoral program who had completed a prepracticum laboratory course, yet had no experience either as practicum trainees or as supervisors. The low-experience supervisors (n = 16) were third- and fourth-year counseling psychology doctoral students who had extensive practicum training as well as formal coursework in supervision that provided training in supervision skills. These participants reported a mean of 29.4 hours of supervision experience (SD = 20.11), supervising beginning practicum students who were counseling clients with career and personal concerns. Supervisors in the high-experience condition (n = 15) were counseling psychologists working either in academic or counseling center settings. The experience level for these participants was 7.3 years (SD = 4.7 years), and they reported supervising both practicum counselors and counseling center interns. All participants voluntarily agreed to take part in the study.

Videotapes

Three videotapes corresponding to the first three developmental levels of Stoltenberg's (1981) model were created for the study. Each tape consisted of an 8-minute simulated counselor–client interaction representing the beginning of the third counseling session. A different confederate counselor was used in each videotape, so that each counselor role played one of the three developmental levels. The decision not to use the same counselors in the three vignettes was intentional in order to enhance the realism of the segments and to facilitate the participants' ability to make independent judgments of the counselors' developmental level.

In an effort to equate the counselors on dimensions other than developmental level, the counselors were selected to be similar on factors such as age, race, and professional dress. In addition, all videotapes were recorded in the same office setting to equalize possible environmental and contextual cues. The three confederate counselors were Caucasian women between ages 35 and 45 who had served or currently were serving as professionals in a counseling setting. None of the counselors were known to the participants. The same client and client role were used to minimize possible interaction effects between developmental level and client problem. The client was a Caucasian woman who presented relationship issues as her primary concern.

A four-step process was used in developing the videotapes, making efforts to minimize overlap across the three levels being role played. First, each confederate counselor was provided with a list of dimensions for the level of the Stoltenberg (1981) model she was to role play. These dimensions were discussed by the counselor, confederate client, and the first author for their verbal and nonverbal implications for the counseling interview. Behaviors indicative of the other two developmental levels also were discussed so they would not be included in the videotaped segment. Second, a practice tape was made and critically reviewed by the counselor, client, first author, and a fourth-year counseling psychology student who was assisting in preparing the tapes. Specific counselor behaviors within the tape were examined for their appropriateness for the intended developmental level. Third, another tape was developed and reviewed by the same four people to ensure an accurate portrayal of the appropriate developmental level. Finally, all three videotapes were viewed by three expert judges (counseling psychology faculty), who agreed that the counselors accurately presented the three developmental levels described by Stoltenberg (1981).

In developing the three videotaped vignettes, specific verbal and nonverbal counselor behaviors characteristic of Stoltenberg's first three developmental levels were included. For the Level 1 counselor, nonverbal behaviors displayed on the tape included a distant, controlled body posture, combined with inconsistent eye contact. Verbal behaviors for the Level 1 counselor involved efforts to problem solve and give advice without adequately exploring the client's issues, and reflecting the content of client statements while avoiding any affective material. For the counselor in the Level 2 tape, nonverbal behaviors included improved eye contact plus a more relaxed body posture, including leaning forward toward the client when nonemotional topics were being discussed. The Level 2 counselor avoided engaging in premature problem-solving or advice-giving and was able to reflect client affect, but only on those issues that were not highly emotional for the client. The Level 3 counselor demonstrated consistent eye contact and an attentive body posture, characterized by leaning forward in a relaxed yet engaged manner. Verbal behaviors involved accurately reflecting client affect on a range of issues, including those that were emotionally difficult for the client. The Level 3 counselor also was able to make process statements during the session (e.g., "It seems difficult for you to talk about this...") and to ask the client for additional information on sensitive issues.

Instrument

The Supervision Level Scale (SLS) was developed by Wiley and Ray (1986) to assess the developmental level of the trainee and the supervisory environment provided by the supervisor within the Stoltenberg (1981) Counselor Complexity Model. Scale items were created by categorizing descriptive phrases from Stoltenberg's model into the four levels for both the person and environment scales. This process

yielded five descriptive phrases for each of the four developmental levels and four environmental levels. Each item on the SLS is rated on a 7-point scale, with 1 = *absolutely untrue* and 7 = *absolutely true*. The descriptive phrases used for the supervisee are referred to as the Person scale (P-scale), whereas descriptive phrases about the environment represent the Environment scale (E-scale).

Wiley and Ray (1986) report median test-retest reliabilities over 2 weeks of .86 for the P-scale (range = .71–.89) and .87 for the E-scale (range = .83–.95). A content validity check on the SLS was performed by Wiley and Ray, using a group of four experts in the Stoltenberg (1981) model (as personally identified by Stoltenberg) and a group of four experienced supervisors who had at least 3 years of postdoctoral supervisor experience. The raters sorted each of the items from the SLS into one of the four developmental levels in the Stoltenberg model. Results indicated that all 20 P-scale and E-scale items were identified with the correct level by at least 50% of the combined group of supervisors.

For the present investigation, only 15 of the original 20 Likert items were used, 5 for each of the first three development levels shown on the videotapes. Following scoring conventions developed by Wiley and Ray (1986), the scores on each of the items representing a given development level were summed. This yielded three subscale scores for each of the two scales. The highest subscale score on the P-scale determined the assessed developmental level (P-score), whereas the highest subscale score on the Environmental scale determined the supervisory environment (E-score).

A *level match score* was derived by taking the absolute value of the actual developmental level role played by the counselor on the tape minus the assessed developmental level (P-score). The scores ranged from 0 to 2 and represent the degree of matching accuracy, with the smaller number indicating greater accuracy (i.e., correct assessment of developmental level). *Congruence scores* were computed by taking the absolute value of the supervisory environment supervisors indicated they would provide to the supervisee (E-score) and subtracting their assessed developmental level (P-score). For example, a congruence score of 1 would be recorded for a supervisor who assessed the counselor at developmental Level 1, yet had indicated she or he would provide a Level 2 supervision environment. Congruence scores ranged from 0 to 2, with lower scores representing greater congruence (i.e., supervisory environment equal to assessed developmental level).

Procedure

All participants were tested in small groups, and they viewed each of the three tapes in a repeated-measures format. Participants were provided with an instrument packet that contained three copies of the SLS (one for each vignette), a demographic data sheet, and a one-page summary of the first two sessions of the client and counselor. Participants read the session summary, viewed the first vignette, and completed the SLS. The viewing of the tape and completion of the SLS were repeated two more times for the remaining vignettes. The viewing order of the vignettes was counterbalanced to provide the following three sequences: Order A, participants viewed tapes of counselors at Level 1, Level 2, then Level 3; Order B, the viewing order was Level 2, Level, 1, then Level 3; Order C, the viewing order was Level 3, Level 2, then Level 1.

RESULTS

The results of the study are reported in three sections. The first section examines the effects of supervisor experience level on the ability to assess accurately the counselor's developmental level and to provide a congruent supervisory environment. The second section explores the accuracy of developmental level assessment across all participants and the effects of viewing order. The third section examines data on all participants in terms of their ability to match supervisory environment with counselor developmental level.

Effects of Supervisor Experience

The effect of supervisor experience on the assessment of supervisee developmental level was tested with a 3 × 3 analysis of variance (ANOVA) (3 experience levels × 3 developmental levels), with level-match scores as the dependent measure. The results of this analysis showed no main effect for supervision experience, $F(2, 39) = .71$, $p > .05$. These findings indicate that supervisors in the high- and low-experience groups were not significantly more effective in assessing counselor developmental level than were supervisors with no experience.

The effect of supervisor experience on the provision of a congruent supervisory environment was tested with 3 × 3 ANOVA on congruence scores, which revealed no main effect for supervisor experience level, $F(2, 39) = .56$, $p > .05$. As was the case for the level-match scores, participants with supervision experience were not more likely than those without experience to provide a congruent supervisory environment.

Assessing Developmental Level

Because supervisor experience was not found to influence level match or congruence scores, the data were collapsed across supervisor experience level for subsequent analyses on developmental level assessment and order effects. A 3 × 3 ANOVA (3 developmental levels × 3 orders of presentation) revealed a significant main effect for developmental level, $F(2, 78) = 6.76$, $p < .01$, and a significant level-order interaction, $F(4, 78) = 3.39$, $p < .01$.

To clarify the interaction, three ANOVAs were computed in which the three developmental levels were compared within each order. Results indicated a significant effect for developmental level in Order A, $F(2, 26) = 9.84$, $p < .01$, and Order C, $F(2, 26) = 4.07$, $p < .05$.

A summary of the level-match scores across the three orders is presented in Table 1. Recalling that the *lower* level-match score re-

TABLE 1

Level-Match Score Means and Standard Deviations by Order

Order	*M*	*SD*
Order A		
Developmental Level 1	.31	.48
Developmental Level 2	.69	.48
Developmental Level 3	.08	.25
Order B		
Developmental Level 2	.50	.52
Developmental Level 1	.56	.81
Developmental Level 3	.13	.34
Order C		
Developmental Level 3	.38	.61
Developmental Level 2	.50	.51
Developmental Level 1	.00	.00

Note. n = 16 for each order. Level match scores can range from 0.2.

flects a more accurate assessment, examination of Table 1 indicates that the significant level effects in Orders A and C appear to be due to lower means (i.e., better matches) for Level 3 in Order A and Level 1 in Order C. This pattern of results suggests that participants were significantly more accurate in assessing developmental level after they had assessed the other two levels in their viewing sequence. The means in Table 1 also indicate that supervisors tended to be least accurate in their assessment of the counselor at Level 2.

When the data are examined across supervisor experience level and order, the results indicate that 37 of 48 supervisors (77%) accurately assessed counselors at Level 1, 21 of 48 (44%) accurately assessed counselors at Level 2, and 40 of 48 (83%) accurately assessed Level 3. A Cochran Q Test was conducted to determine whether the three sets of frequencies differed significantly from each other (Siegel & Castellan, 1988). The frequency of correct matches between developmental level was found to differ significantly (Q = 24.05; $p < .01$), indicating that supervisors were significantly less accurate at correctly assessing Level 2 counselors than either Level 1 or 3 counselors.

Level-Environment Match

When congruence scores were examined by collapsing across all levels of supervisor experience, the 3 × 3 ANOVA (3 developmental levels × 3 orders) revealed no significant main or interaction effects. Mean congruence scores were relatively consistent across the three developmental levels (Level 1 = .52; Level 2 = .48; Level 3 = .33). The values of the congruence scores suggest that supervisors generally indicated they would provide congruent supervisory environments based on their assessment of the counselor's developmental level. For Level 1, 29 of 48 supervisors (60%) were congruent; for Level 2, 25 of 48 (52%) were congruent; for Level 3, 32 of 48 (67%) were congruent.

A more detailed examination of congruence scores reveals some interesting findings relevant to the level-environment match process. Because congruence scores were determined on the basis of the fit between assessed developmental level and recommended supervision environment, it was possible that a zero congruence score could occur even though the supervisor had inaccurately assessed the developmental level of the supervisee. For example, if a supervisor had viewed the tape representing the Level 1 counselor, yet assessed that counselor as being at Level 2 and recommended a Level 2 supervision environment, a zero congruence score would be realized.

Table 2 indicates the number of participants in each category for assessed developmental level (P-score) by recommended supervisory environment (E-score) for each of the three developmental level tapes. Examination of the development level 1 section of the table reveals that 24 supervisors (51%) accurately assessed the counselor as being at Level 1 and recommended a Level 1 supervisory environment. Misassessments that yielded zero congruence scores are reflected in the four supervisors (8%) who assessed the counselor as being at Level 2 and recommended a Level 2 environment, and the one supervisor (2%) who made a Level 3 assessment and Level 3 environment match.

Further examination of Table 2 shows that the number of supervisors making accurate judgments of both counselor developmental level and providing a congruent supervisory environment varied across the three tapes. In contrast to the 51% for Level 1, for Level 2, only 14 supervisors (30%) were accurate in the assessment of developmental level and provided a congruent environment. For Level 3, 25 supervisors (53%) made the appropriate level–environment match. The low rate of accurate matches for the Level 2 tape relative to the Levels 1 and 3 tapes is consistent with the findings reported in the previous section in which supervisors were significantly less accurate at assessing the developmental level of the Level 2 counselors.

TABLE 2

Developmental Level and Environment Match Grid for All Participants

	P-score		
E-score	**1**	**2**	**3**
Developmental Level 1			
1	24	3	1
2	7	4	1
3	5	1	1
Developmental Level 2			
1	8	2	0
2	4	14	11
3	0	4	3
Developmental Level 3			
1	1	0	0
2	0	5	14
3	0	2	25

DISCUSSION

Examination of the results of this study reveals four general findings. First, the independent variable of supervisor experience was not significantly related to either the assessment of supervisee developmental level or level-environment match. Supervisors with no-, low-, or high-supervision experience tended to be equally effective in assessing the developmental level of the three counselors and in providing matching supervisory environments. Second, supervisors, regardless of experience level, seemed to have the most difficulty accurately assessing developmental Level 2 in Stoltenberg's (1981) model. Third, a significant order effect was noted, suggesting that the supervisors tended to make relative judgments regarding counselor developmental level. Supervisors seemed to be most accurate in their level assessments of the last counselor vignette they viewed. Finally, supervisors tended to be reasonably accurate in their recommendations for appropriate supervision environments, although again they were less successful in matching environments to the Level 2 counselor.

The lack of significant findings because of supervisor experience level was somewhat surprising and inconsistent with results reported by Marikis, Russell, and Dell (1985). In the Marikis et al. investigation, significant differences were observed between supervisors with no supervision experience and those with low and high levels of experience. In part, the inconsistent findings may have been because of the different tasks required of the supervisors in the two studies and in the dependent measures used. Supervisors in the Marikis et al. study observed a half-hour counselor–client interaction and recorded their plans for a subsequent supervision session. In the current investigation, supervisors observed three 8-minute vignettes, making assessments of counselor developmental level and supervision environment after each segment. It is possible that the task used in this study was not sufficiently detailed to allow discrimination

among skill differences across the three levels of supervisor experience. On the other hand, even those participants with no supervision experience (and very limited counseling experience) were reasonably accurate in their level and environment assessments. It seems as if even those supervisors with no experience were able to recognize different skill levels in the counselors. Although the inexperienced participants in this study might not have been able to function as Level 2 or Level 3 counselors themselves, they apparently were able to recognize skill level differences when they were demonstrated.

The apparent difficulty that supervisors experienced in assessing the Level 2 counselor raises some interesting issues. In the Stoltenberg model, Level 2 is characterized by a conflict between the counselor's dependency needs and a desire for autonomy and may show itself behaviorally through fluctuations in counselor motivation and skill. Accordingly, Level 2 might not function as an independent level as the Counselor Complexity Model would suggest, but rather it may embody behaviors characteristic of both Level 1 and Level 3. In this context the supervisor is faced with inconsistent counselor behaviors that may make it difficult to categorize the supervisee according to a specific developmental level. If Stoltenberg's Level 2 does in fact represent a composite of level 1 and 3 counselor behaviors, support may be found for Stoltenberg and Delworth's (1987) developmental model. According to this perspective, supervisees may function at different developmental levels, depending on the task being performed. Hence, instead of there being discrete developmental levels that are independent of one another, the levels are overlapping and interdependent. This may be particularly true for the Level 2 counselor who is "in the middle," exhibiting overlaps from both levels 1 and 3.

Holloway (1987) has been critical of developmental models of supervision on conceptual and theoretical grounds, whereas Ellis and Dell (1986), Ellis, Dell, and Good (1988), and Heppner and Roehlke (1984) have challenged the validity of the models on the basis of a lack of consistent empirical support. The findings of this study call into question those supervision models that argue for counselor development in discrete, relatively independent stages or levels. Rather, these results suggest a much more fluid change process whereby counselors may ebb and flow from one developmental level to the next.

Data from the congruence scores on developmental level and supervision environment match serves further to highlight some of the difficulties participants seem to have with the counselor exhibiting Level 2 behaviors. The number of supervisors both accurately assessing developmental level and matching the appropriate environment was much lower for the Level 2 counselor (n = 14) than for the counselors demonstrating Levels 1 or 3 (ns = 24 and 25, respectively).

The presence of significant effects because of the order in which the tapes were presented was an unexpected finding, yet one that may have important implications for training. The results of this study suggest that supervisees may be assessed in comparison to other supervisees rather than independently. If this finding were to generalize to actual training settings, it would raise the possibility that judgments about a supervisee's development may be influenced not only by his or her own skill level but also by the referent group to which that person is being compared. To the extent that judgments about supervisee competency and recommendations for further training frequently are based on these assessments, supervisors should be aware of the possibility that their evaluations may be influenced (positively or negatively) by the performance of other trainees in the referent group.

Attempts to generalize the results of this investigation to supervision settings need to be done with caution given certain design limitations. First, the analogue nature of the study provided only a limited amount of time for supervisors to observe the counselor. In actual supervision, supervisors have the opportunity to interact with supervisees for much longer intervals before making assessments about developmental level and appropriate supervision environment. It is possible that if longer observation periods had been allowed in this study, supervisors might have been more accurate in their judgments, and main effects for experience level might have been observed.

A second limitation concerns our decision not to counterbalance the ordering of the tapes completely. Because of the limited sample size within the three experience levels, the tapes were presented in one of three possible orders rather than one of six orders. Because order effects may play a role in the assessment process, future research should attempt to provide for the complete counterbalancing of vignettes. An additional limitation results from the decision not to counterbalance counselors across all three levels demonstrated on the videotapes. Although efforts were made to equate the counselors on all important dimensions except developmental level, it is possible that a Counselor × Developmental Level interaction could have influenced the results.

Finally, scoring difficulties may exist with the SLS that require the attention of researchers using this instrument in the future. Currently, the SLS is scored such that ratings of developmental level or supervision environment are placed into categories in an all-or-none manner. For example, a supervisee who is rated as demonstrating behaviors characteristic of Levels 2, 3, and 4 will be categorized as a Level 2 counselor if that is the level that is ranked with the highest absolute point total. A weighted-scoring procedure taking into account the values of all the rated levels might provide a more accurate assessment of both developmental level and environment.

Despite these limitations, the results suggest several interesting findings about supervisor experience, the assessment of supervisee developmental level, and supervision environmental fit. We hope that continued efforts to empirically evaluate the assumptions of the developmental models of supervision will serve to add clarity to the roles of developmental processes in both supervision theory and practice.

REFERENCES

Borders, D. L. (1989). A pragmatic agenda for developmental supervision research. *Counselor Education and Supervision, 29,* 16–24.

Cross, D. G., & Brown, D. (1983). Counselor supervision as a function of trainee experience: Analysis of specific behaviors. *Counselor Education and Supervision, 23,* 333–341.

Ellis, M. V. (1991). Research in clinical supervision: Revitalizing a scientific agenda. *Counselor Education and Supervision, 30,* 238–251.

Ellis, M. V., & Dell, D. M. (1986). Dimensionality of supervisor roles: Supervisor's perception of supervision. *Journal of Counseling Psychology, 33,* 282–291.

Ellis, M. V., Dell, D. M., & Good, G. E. (1988). Counselor trainees' perceptions of supervisor roles: Two studies testing the dimensionality of supervision. *Journal of Counseling Psychology, 35,* 315–324.

Goodyear, R. K. (1988, August). In E. Johnson (Chair), *Toward a developmental theory of supervision.* Symposium conducted at the meeting of the American Psychological Association, Atlanta, GA.

Heppner, P. P., & Roehlke, H. J. (1984). Differences among supervisees at different levels of training: Implications for a developmental model of supervision. *Journal of Counseling Psychology, 31,* 76–90.

Hogan, R. A. (1964). Issues and approaches in supervision. *Psychotherapy: Theory, Research and Practice, 1*, 139–141.

Holloway, E. L. (1987). Developmental models of supervision: Is it development? *Professional Psychology: Research and Practice, 18*, 209–216.

Johnson, E., & Moses, N. C. (1988, August). The dynamic developmental model of supervision. In E. Johnson (Chair), *Toward a developmental theory of supervision*. Symposium conducted at the meeting of the American Psychological Association, Atlanta, GA.

Krause, A. A., & Allen, G. J. (1988). Perceptions of counselor supervision: An examination of Stoltenberg's model from the perspectives of supervisor and supervisee. *Journal of Counseling Psychology, 35*, 77–80.

Littrell, J. M., Lee-Borden, N., & Lorenz, J. (1979). Theory and application: A developmental framework for counseling supervision. *Counselor Education and Supervision, 19*, 129–136.

Loganbill, C., Hardy, E., & Delworth, U. (1982). Supervision: A conceptual model. *The Counseling Psychologist, 10*, 3–42.

Marikis, D. A., Russell, R. K., & Dell, D. M. (1985). Effects of supervisor experience level on planning and in-session supervisor verbal behavior. *Journal of Counseling Psychology, 32*, 410–416.

Miars, R. D., Tracey, T. J., Ray, P. R., Cornfeld, J. L., O'Farrell, M., & Gelso, C. J. (1983). Variation in supervision process across trainee experience levels. *Journal of Counseling Psychology, 30*, 403–412.

Siegel, S., & Castellan, N. J., Jr., (1988). *Nonparametric statistics for the behavioral sciences* (2nd ed.). New York: McGraw-Hill.

Stoltenberg, C. (1981). Approaching supervision from a developmental perspective: The counselor complexity model. *Journal of Counseling Psychology, 28*, 59–65.

Stoltenberg, C. D., & Delworth, U. (1987). *Supervising counselors and therapists*. San Francisco, CA: Jossey-Bass.

Wiley, M. O., & Ray, P. B. (1986). Counseling supervision by developmental level. *Journal of Counseling Psychology, 33*, 439–445.

Worthington, E. L. (1984). Empirical investigation of supervision of counselors as they gain experience. *Journal of Counseling Psychology, 31*, 63–75.

***Jean Chagnon** is director of counseling at Carleton College. **Richard K. Russell** is an associate professor at Ohio State University. Correspondence regarding this article should be sent to Jean Chagnon, One North College Ave., Northfield, MN 55057.*