Pre-Service Teachers' Perceptions of Cooperative Teachers' Supervisory Styles and Satisfaction in Singapore

Shyh-shin Wong

National Institute of Education
Nanyang Technological University, Singapore

This study examines the following four supervision issues in the instructional or teaching supervision of 47 pre-service teachers by 42 co-operative teachers: (a) Relationships among the different supervisory styles (i.e., Attractive Supervisory Style, Interpersonally Sensitive Supervisory Style, and Task Oriented Supervisory Style) as measured by the Supervisory Styles Inventory (Friedlander & Ward, 1984); (b) Relative perceived prevalence of different supervisory styles; (c) Relationship between supervisory styles and supervisees' satisfaction with their supervisors; and (d) Prediction of supervisees' satisfaction with their supervisors by the different supervisory styles. The results showed that most cooperating teachers are perceived by pre-service (trainee) teachers to utilize the attractive or non-directive supervisory style. This supervisory style was found to have the highest significant bivariate correlation coefficient and the only significant partial correlation coefficient with satisfaction with supervisor.

Correspondence concerning this article should be addressed to Shyh-shin Wong, Psychological Studies Academic Group, National Institute of Education, Nanyang Technological University, 1 Nanyang Walk, Singapore 637616, Republic of Singapore. E-mail: sswong@nie.edu.sg

Finally, attractive supervisory style is the only significant predictor in a multiple standard regression with satisfaction with supervisor as the criterion. Limitations and implications are discussed in relation to the findings of this study.

Key words: supervisory approach; supervision mode; supervision process; supervisory style

Supervision

The role of supervision has been increasingly becoming more important in Singapore, in many fields (e.g., Wong, 2002), including the field of teaching (Sharpe, Ngoh, Crawford, & Gopinathan, 1994), as Singapore becomes a more developed and industrialized country. In Singapore, the National Institute of Education (NIE) uses the traditional triad of pre-service (trainee) teacher—cooperating teacher—university supervisor (also known as supervision coordinator), the most prevalent model of supervisory practice in the United States (Shiveley & Poetter, 2002), for supervising pre-service (trainee) teachers during their teaching practice practicum. In 1999, the original "Integrative Model" was replaced by the "NIE-School Partnership Model," which assigned a more prominent role to "cooperating teachers" (experienced in-service teachers who are designated by principals to be supervisors) in mentoring and supervising pre-service (trainee) teachers (Atputhasamy, 2004; Wong & Goh, 2002). With more responsibility given to the schools and cooperative teachers, it is understandable that diversity in supervision practice standards may surface. Hence, more research on instructional or teaching supervision that can guide supervision practice is warranted.

An etymological definition of supervision suggests a role of overseeing, directing, or managing (Webster's New World Dictionary, 1988). This traditional definition is considered by some researchers (e.g., Glickman, Gordon, & Ross-Gordon, 2001, 2004) to be outdated since the definition reflects a more traditional or conventional model of supervision, which fo-

cuses on the main functions of supervision as being "control", "evaluation", "inspection", and "management". Other more technical definitions pointed to the varying perspectives (e.g., instructional, organizational, people) in which the supervisor can approach the process and task of supervision as well as different roles the supervisor can adopt during supervision (e.g., appraiser/assessor, change agent, coach/mentor, communicator, consultant, coordinator, decision maker, evaluator, facilitator, group leader, leader, planner/organizer, and motivator/encourager) (Beach & Reinhartz, 2000; Oliva & Pawlas, 2001).

The multiplicity of the available definitions of supervision brings to light Beach and Reinhartz's point about there being "no single definition of supervision" that sufficiently captures the complex and intricate meaning, and often changing role of supervision (Beach & Reinhartz, 2000). As a result, many different definitions have been proposed reflecting the underlying different philosophical stances of the several models of supervision currently available in the United States and elsewhere. These supervision models are quite influential in Singapore, because the National Institute of Education (NIE), which trains most of Singapore's teachers, adapts these American supervision models for the training and education of teachers.

Currently, there are two main, but interrelated ways of understanding how supervision is conducted in the teaching profession. The first way is by understanding the different sequential processes and sub-processes that are involved in carrying out the supervision process, subsumed under different structural arrangements. This is known as "supervision process" in the supervision literature. The second way is to examine the individual differences in supervisory behaviors among supervisors even when they are using the same "supervision process" model. These individual differences in supervision or supervisory behaviors are known as the "supervisory approach" (Glickman et al., 2001) or the "supervisory style" (Friedlander & Ward, 1984). Each of these two ways of supervision will be further examined shortly.

Supervision Process

As mentioned above, the first way of understanding how supervision is conducted in the teaching profession is by understanding the different processes and sub-processes that are involved in supervision, subsumed under different structural arrangements. To date, there are at least seven major ways of structuring and implementing the supervision processes, which can be categorized into seven major groups. These different supervision models advocate for different supervision processes; different structural and sequential arrangement of these supervision processes; and implementation of these supervision processes. These seven groups of the "supervision process" models are: (a) Traditional or conventional supervision models, (b) Clinical supervision models,(c) Developmental supervision models, (d) Collegial and collaborative supervision models, (e) Contextual supervision models, (f) Self-assessment supervision models, and (g) Integrative supervision models (Beach & Reinhartz, 2000; Glickman et al., 2001, 2004; Oliva & Pawlas, 2001; Ralph, 2002, 2003).

The term traditional or conventional supervision models have been used to refer to the supervision models that describe and characterize the American school supervisory practices in the pre-1930s (Glickman et al., 2001). In this model, supervision serves primarily as a vehicle of control, evaluation, inspection, and management. In reactions to the limitations and dissatisfactions of these earlier supervisory practices, other supervision models were developed. Some of these later supervision models include the clinical supervision models, developmental supervision models, collegial and collaborative supervision models, contextual supervision models, self-assessment supervision models, and integrative supervision models.

The clinical supervision models, pioneered by Cogan (1973), Goldhammer (1969), Goldhammer, Anderson, and Krajewski (1993), are later further developed by many researchers and practitioners (e.g., Acheson & Gall, 1997, 2003) over a period of time, with different variations, some minor, some major. These clinical supervision models are quite popular

with many teacher education institutes, including the NIE in Singapore. They are especially relevant for training pre-service or trainee teachers. The main advantage and characteristic of this model is the delineation of specific supervision stages (with associative behaviors and tasks for both supervisors and supervisees) that are embedded in a supervision cycle, which can be repeated over and over again.

Most of the clinical supervision models usually have five stages in a supervision cycle (e.g., Goldhammer's [1969] 5-Step Clinical Supervision Process, Boyan and Copeland's [1978] 5-Stage, 10-Step Sequential Process or Instructional Supervision Training Program): (a) Preobservation conference; (b) Classroom observation; (c) Analysis and strategy, or analysis of data; (d) Supervision conference or postobservation conference; and (e) Postconference analysis or supervisor reflection. As mentioned above, each of these specific supervision stages in the supervision cycle provide the structure for associative behaviors and tasks for both supervisors and supervisees. Moreover, the supervision cycle incorporates many important elements of a proper supervision in the different supervision stages.

Examples of the associative behaviors and tasks for both supervisors and supervisees under each stage in Boyan and Copeland's (1978) Instructional Supervision Training Program include the following:

Stage 1: Preobservation Conference:
- Identify behavioral area of concern
- Establish criteria for observation
- Construct or select data collection format

Stage 2: Classroom Observation:
- Collect pertinent classroom interaction data

Stage 3: Analysis of Data:
- Put data in visual format
- Develop list of remediation or maintenance

Stage 4: Postobservation Conference:
- Report and discuss observation data
- Identify corrective strategies cooperatively

Stage 5: Supervisor Reflection:

- Reflect on process to identify ways to improve
- Begin anew as needed

In Singapore, an adapted version of the clinical supervision model is used by the cooperating teachers as well as NIE supervision coordinators (university supervisors). There are three stages in this NIE clinical supervision model compared to the five stages in the American clinical supervision model (Beach & Reinhartz, 2000). In the NIE clinical supervision model, the three stages in the "supervision cycle" consist of: (a) Pre-observation discussion of lesson plans, (b) Lesson observation, and (c) Post-observation conference.

Developmental supervision models take into consideration the developmental needs of supervisees. The main advantage and characteristic of this type of model is the attempt to cater the supervision (i.e., supervisory styles) to the developmental needs of the supervisees. Carl Glickman and his colleagues develop one of the most influential developmental supervision models in the United States (Beach & Reinhartz, 2000; Glickman et al., 2001, 2004). There are two interacting dimensions capturing the developmental needs of the supervisees in this model: (a) Level of commitment, and (b) Level of conceptual thinking (abstraction). Another developmental supervision model is the differentiated supervision model (Glatthorn, 1990, 1997), although this model is relatively less well known compared to the Glickman et al.'s model.

The collegial and collaborative supervision models belong to the fourth kind of supervision model being developed. It is actually not a singular model, but refers to a group of models (e.g., cognitive coaching, peer coaching, and mentoring) that shared the common characteristic of emphasizing the importance of having a collegial, collaborative, or a combination of both collegial, collaborative approaches towards supervision (Beach & Reinhartz, 2000). In other words, these models reduce the power distance between supervisor and supervisee, and adopt a more egalitarian and democratic type of supervisor-supervisee relationship during the supervision

process. In addition, there is more shared responsibility and collaboration in tackling supervision problems brought up during the supervision session. One popular cognitive coaching model is developed by Costa and Garmston (1994, 2002).

Compared to the other supervision models mentioned above, contextual supervision models stress the importance of context in which supervision takes place. For example, Duncan Waite (1995) develops the situationally contexted supervision model, which examines contextual issues such as language, culture, power, environment, etc. He even proposes the use of ethnography and dialogic supervision based on ideas drawn from qualitative research traditions and postmodernism.

The self-assessment supervision models propose a process of supervision in which the teachers themselves take primary charge of the supervision process. This approach is usually used as a way to supplement the supervision provided by the supervisor. One self-assessment supervision model even share a common characteristic with the clinical supervision model in that the supervision process is divided into stages throughout the supervision cycle or supervision process (Beach & Reinhartz, 2000, pp. 146–149): (a) Initiating self-assessment using instruments and inventories so as to analyze and reflect on own instructional effectiveness, (b) Developing a perception or profile of professional self from the information collected earlier, (c) Soliciting feedback from other sources to determine the perception of others (e.g., supervisor, peers, students), (d) Developing a profile of existing personal and professional qualities, (e) Developing a self-improvement plan to improve instructional effectiveness, (f) Implementation of self-improvement plan (timeline and indicators), and (g) Soliciting feedback and reassess the effectiveness of the change or changes and decides if additional changes are necessary.

Finally, integrative supervision models form the sixth category of the different supervision models of supervision process. According to Beach and Reinhartz (2000), one such integrative model was indirectly explored by Sparks-Langer and Colton (1991) when they summarized the research

on teachers' reflective thinking with implications towards a self-directed practice. It appears that there is a possibility to subsume the best elements of the clinical supervision models, developmental supervision model, collegial and collaborative supervision models, and self-assessment supervision model all into in one integrative model.

Ralph (2002, 2003) actually attempts to develop one such integrative model of supervision for use in the Canadian context, known as "Contextual Supervision" (CS). Ralph defines contextual supervision as a "developmental leadership model that is used by supervisors to promote the professional development of supervisees" (p. 30). In this model, Ralph claims to have incorporated many of the strengths of seven other supervision models (i.e., Hersey & Blanchard's [1988] Situational Leadership model; Glickman et al.'s [2001, 2004] Developmental Supervision model; Glatthorn's [1990, 1997] Differentiated Supervision model; Acheson & Gall [1997, 2003] Clinical Supervision model; Waite's [1995] Situationally Contextual Supervision model; Costa and Garmston's [1994, 2002] Cognitive Coaching; and Servgiovanni & Starratt's [1998] Supervision II) and bypasses their limitations.

For example, similar to Glickman et al.'s (2001, 2004) "Developmental Supervision" model, Ralph's (2002, 2003) "Contextual Supervision" model also attempts to match the supervision (i.e., supervisory styles) to the developmental needs of the supervisees. However, in contrast to the "Developmental Supervision" model, the two interacting dimensions capturing the developmental needs of the supervisees' in this model are: (a) Level of confidence, and (b) Level of competence.

Supervisory Style

As mentioned above, the second way of understanding how supervision is conducted in the teaching profession is to examine the individual differences in supervisory behaviors among supervisors even when they are using the same "supervision process" model. The way an individual supervisor

supervises or carries out supervision is termed "supervisory approach" (Glickman et al., 2001) or "supervisory style" (Friedlander & Ward, 1984; Ralph, 2002, 2003). Specifically, supervisory style has been defined as "the supervisor's distinctive manner of approaching and responding to trainees and of implementing supervision" (Friedlander & Ward, 1984, p. 541).

In their developmental supervision model, Glickman et al. (2001, 2004) distinguish between four supervisory approaches/styles — directive controlling approach, directive informational approach, collaborative approach, and nondirective approach. Ralph (2002, 2003) also proposes four supervisory styles — S1 (supervisor's high task orientation and low supportive behaviors), S2 (supervisor's high task orientation and high supportive behaviors), S3 (supervisor's low task orientation and high supportive behaviors), and S4 (supervisor's low task orientation and low supportive behaviors) supervisory style. In contrast, Friedlander and Ward (1984) distinguish only three supervisory styles or approaches — attractive supervisory style, interpersonally sensitive supervisory style, and task oriented supervisory style. Comparing these three classification systems, Friedlander and Ward's (1984) task oriented supervisory style is similar to both directive controlling supervisory approach and directive informational supervisory approach combined together in Glickman et al.'s (2001, 2004) model. Task oriented supervisory style is also similar to both S1 supervisory style and S2 supervisory style combined together in Ralph's model. Interpersonally sensitive supervisory style is similar to the collaborative supervisory approach and the S3 supervisory style. Attractive supervisory style is similar to the nondirective supervisory approach and the S4 supervisory style.

Empirically, it is also found that not all supervisors supervise the same way. Moreover, these individual differences could be categorized under a variety of distinguishable supervisory styles (Friedlander & Ward, 1984; Glickman et al., 2001; McJunkin, Justen, Strickland, & Justen, 1998). For example, Friedlander and Ward (1984) found that there are three styles of supervision, namely, attractive style, interpersonally sensitive style, and task oriented style after a series of empirical development and validation studies.

McJunkin, Justen, Strickland, and Justen (1998) also found out that supervisees perceived their supervisors to use three supervisory styles — nondirective style, collaborative style, and directive style.

Attractive Supervisory Style can be defined as a collegial or peer oriented approach to supervision (Friedlander & Ward, 1984), using mainly a participative leadership style (Bittel & Newstrom, 1990). Cooperating teachers who are found to be displayed this type of supervisory style as the prominent supervision approach are perceived by pre-service or trainee teachers to be relatively more flexible, friendly, open, positive, supportive, trusting, and warm. In terms of possible overlapping constructs, the Attractive Supervisory Style is similar to the Nondirective Supervisory Approach in the Developmental supervision model (Glickman et al., 2001, 2004). In terms of responsibility allocation, this supervisory style allows for minimum supervisor responsibility, while encouraging maximum supervisee responsibility (Glickman et al., 2001, 2004). This supervisory style views supervisees as capable of analyzing and solving their own problems, and the outcome is generated by the supervisee, who determines his or her own action plan. Supervisory behaviors prominent in this style include listening, clarifying, encouraging, reflecting (Beach & Reinhartz, 2000; Glickman et al., 2001, 2004). In their interpretation of this supervisory style, Sparks-Langer and Colton (1991) (as cited in Beach & Reinhartz, 2000) proposes using peer or cognitive coaching that includes a modified version of clinical supervision, with the preobservation conference and data collection followed by a postobservation conference (similar to the 3-stage clinical supervision model used by NIE). The purpose of this nondirective supervisory style for Sparks-Langer and Colton (1991) is self-assessment and self-reflection

On the surface, the Interpersonally Sensitive Supervisory Style appears to be quite similar to the Attractive Supervisory Style, since both types of supervisory styles tend to be more people-oriented or people-centered. Interpersonally Sensitive Supervisory Style is defined as a relationship or counseling oriented approach to supervision (Friedlander & Ward, 1984), using mainly a consultative leadership style (Bittel & Newstrom, 1990).

Cooperating teachers who displayed this type of supervisory style as the prominent supervision approach are perceived by trainee teachers to be relatively more committed, creative, intuitive, invested, perceptive, reflective, resourceful, and therapeutic. The Interpersonally Sensitive Supervisory Style is also similar to the collaborative approach in the developmental model of supervision. In terms of responsibility allocation, this supervisory style allows for moderate supervisor responsibility, as well as moderate supervisee responsibility (Glickman et al., 2001, 2004). The outcome of this supervisory style is a mutually accepted action plan. Supervisory behaviors prominent in this style include listening, presenting, problem solving, and negotiating (Beach & Reinhartz, 2000; Glickman et al., 2001, 2004). In their interpretation of this supervisory style, Sparks-Langer and Colton (1991) (as cited in Beach & Reinhartz) proposes using action research, interactive journals, modeling/teaming, goal setting, analysis of ideas, and reciprocal conferences.

Finally, Task Oriented Supervisory Style is defined as a content-focused or instruction-focused approach to supervision (Friedlander & Ward, 1984), using mainly a directive leadership style (Bittel & Newstrom, 1990). Cooperating teachers who displayed this type of supervisory style as the prominent supervision approach are perceived by trainee teachers to be relatively more concrete, didactic, explicit, evaluative, focused, goal oriented, practical, prescriptive, structured, and thorough. Here, the Task Oriented Supervisory Style is also similar to the directive approaches in the developmental model of supervision. In terms of responsibility allocation, this supervisory style allows for maximum supervisor responsibility, while encouraging minimum supervisee responsibility (Glickman et al., 2001, 2004). For the directive supervisory styles, the action plan is either supervisor-suggested action plan (for directive informational supervisory style) or supervisor-assigned action plan (for directive control supervisory style). Supervisory behaviors prominent in this style include directing, standardizing, and reinforcing consequences (Beach & Reinhartz, 2000; Glickman et al., 2001, 2004). In their interpretation of this supervisory style,

Sparks-Langer and Colton (1991) proposes using the clinical supervision cycle of starting with a preobservation conference, data collection with a help of a coach, and concluding with postobservation conference plus reflective journal writing.

Research Questions

In this study, the author is interested to explore the following four issues:
1. to what extent are these supervisory styles similar or different?
2. whether cooperating teachers who are entrusted with supervising trainee teachers in Singapore display different supervisory styles according to their supervisees (i.e., pre-service or trainee teachers).
3. whether these different supervisory styles are correlated with supervisees' satisfaction with their supervisors.
4. whether these different supervisory styles can predict supervisees' satisfaction with their supervisors.

Based on the above-mentioned four issues, the following four research questions were explored in this study:
1. What are the correlation and covariance among the three supervisory styles in the ratings obtained?
2. What are the relative frequencies of the three supervisory styles in the ratings obtained?
3. Which of the three supervisory styles are significantly correlated with satisfaction with supervisor?
4. Which of the three supervisory styles significantly predict satisfaction with supervisor?

Previous Findings

A review of published studies concerning supervisory style or approach revealed only a few American studies. Since NIE also uses the adapted ver-

sion of the American Clinical Supervision Model, the findings of the current study can be appropriately compared to previous findings by the Americans. The major findings in these American studies include the following:

- Most supervisors are reported by preservice teachers to use the collaborative (interpersonally sensitive) supervisory style, followed by directive (task-oriented) supervisory style, and nondirective (attractive) supervisory style respectively (McJunkin et al., 1998).
- Teachers differ in the type of supervisory style they prefer (Glickman, 1985; Glickman et al., 2001, 2004; McJunkin et al., 1998).
- Most preservice teachers prefer a directive informational (task-oriented) supervisory style (Copeland, 1980; Copeland & Atkinson, 1978; Zonca, 1973; as cited in Glickman et al., 2001, 2004). \
- Most preservice teachers prefer a collaborative (interpersonally sensitive) supervisory style, followed by directive (task-oriented) supervisory style and nondirective (attractive) supervisory style respectively (McJunkin et al., 1998).
- Novice or neophyte (pre-service and beginning/entry-level teachers) teachers prefer either the directive informational (task-oriented) supervisory style or the collaborative (interpersonally sensitive) supervisory style (Glickman et al., 2001, 2004).
- Most entry-level teachers prefer a collaborative (interpersonally sensitive) supervisory style (Humphrey, 1983; as cited in Glickman et al., 2001, 2004).
- Most beginning teachers prefer more a directive supervisory style (task-oriented) supervisory style (Glickman, 1985).
- Most experienced teachers prefer a nondirective (attractive) supervisory style (Glickman, 1985).
- Most experienced teachers prefer a collaborative (interpersonally sensitive) supervisory style, followed by nondirective (attractive) and directive (task-oriented) supervisory style respectively (Blumberg, 1980; Blumberg & Weber, 1968; Ginkel, 1983; Glickman et al., 2001, 2004).

Method

Participants

A total of 47 pre-service (trainee) teachers participated in the pilot study. Participants are predominantly female (38 females, 81%; 9 males, 19%). In terms of racial composition, there are 32 Chinese (68.1%), 8 Malays (17%), 1 Indian (4.3%), 1 Eurasian (2.1%), and 4 Others (8.5%). The participants' age range from 19 to 36 years old ($M = 24.277$ years; $SD = 3.792$ years). Finally, they provided a total of 91 ratings on 42 cooperating teachers, of which two cooperating teachers received three ratings from three different trainee teachers, followed by three cooperating teachers who received two ratings from two different trainee teachers, and the rest received one rating from one trainee teacher.

Measure

The Supervisory Styles Inventory (Friedlander & Ward, 1984) is a 33-item, 7-point scale inventory, which consists of three subscales measuring three different supervisory styles: (a) Attractive Supervisory Style Subscale (Item No.15, 16, 22, 23, 29, 30, 33); (b) Interpersonally Sensitive Supervisory Style Subscale (Item No. 2, 5, 10, 11, 21, 25, 26, 28); and (c) Task Oriented Supervisory Style Subscale (Item No. 1, 3, 4, 7, 13, 14, 17, 18, 19, 20). Items 6, 8, 9, 12, 24, 27, 31, 32 are filler items. Examples of the items in each of the three subscales are as follows.

Attractive Supervisory Style (ASS) Subscale:
    Friendly...........1 (Not Very) 2 3 4 5 6 7 (Very)
Interpersonally Sensitive Supervisory Style (ISSS) Subscale:
    Perceptive...........1 (Not Very) 2 3 4 5 6 7 (Very)
Task Oriented Supervisory Style (TOSS) Subscale:
    Goal-Oriented..........1 (Not Very) 2 3 4 ˙5 6 7 (Very)

The Supervisory Styles Inventory has been used a number of times in the field of supervision since its publication. A search of the PsyArticle database from 1990 to 2003 revealed 12 studies using this inventory, while

a search of the ProQuest Journals database from 1987 to 2004 revealed 27 studies using this inventory. In this current study, the Supervisory Styles Inventory was used with addition of one items regarding "satisfaction with supervisor". The modified SSI is a 34-item instrument based on a 7-point scale (1 = Not Very; 7 = Very). The item regarding "satisfaction with supervisor" was added to the original 33-item SSI is also based on a 7-point scale (1 = Not Very; 7 = Very).

In terms of psychometric properties, the SSI reportedly demonstrated robust reliabilities and construct validity based on five development and validation studies (Friedlander & Ward, 1984). Study 1 and 2 were used for scale construction, reliability analyses, and initial validation using factor analyses and convergent validity, whose purpose was to identify the major dimensions of supervision underlying experienced supervisors' self-preceptions (Study 1) and supervisees' perceptions of their primary supervisors (Study 2). Study 3 and 4 were cross validation studies whose purpose is to attempt to replicate the factor structure and reliability of the SSI on new samples of supervisors (Study 3) and trainees (Study 4). These four studies consistently revealed three factors among the perceptions of the heterogeneous samples of supervisees and supervisors. In Study 5, the SSI scales were found to discriminate within and between expert supervisors with different theoretical orientations. As in the Friedlander & Ward's (1984) studies, the Alpha Coefficients in this study are also high (Alpha-$_{ASS}$ = .929; Alpha-$_{ISSS}$ = .903; Alpha-$_{TOSS}$ = .897), which mean that the items within each subscale are internally consistent and closely related to each other.

Procedure

The participants were asked by participating NIE supervision coordinators in charge of their teaching practice practicum to complete the modified Supervisory Styles Inventory (SSI) after the completion of their teaching practice practicum. They were asked to complete one inventory for each cooperating teacher that was assigned to them. The number of cooperating

teachers that were assigned to them varies from 1 to 4 (See Table 1). This distribution was quite similar to the distribution found by Sharpe, Ngoh, Crawford, and Gopinathan (1994) in their study, where the modal frequency is also 2 cooperating teachers.

Table 1   Number of Cooperating Teachers Assigned to Trainee Teachers

No. of CTs Assigned	N	Percentage
1	11	23.40
2	30	63.83
3	4	8.51
4	2	4.26
Total	47	100

Results

Relationship Among Supervisory Styles

Research question 1 was explored using 2-tailed Pearson correlation procedure. The results showed that that even though these three supervisory styles have their own unique variance, they nevertheless are closely related to each, based on the significantly large to very large correlation coefficients (See Table 2).

Table 2   Bivariate Intercorrelations Among Supervisory Styles and Satisfaction with Supervisor

Variables	1	2	3	4
1. Attractive Style	–	.735*	.692*	.828*
2. Interpersonally Sensitive Style		–	.887*	.703*
3. Task Oriented Style			–	.629*
4. Satisfaction with Supervisor				–

Note. * $p < .001$, two-tailed

Relative Perceived Prevalence of Supervisory Styles

Research question 2 explores the relative occurrences among the three different supervision styles in the current sample. The supervision style is determined by the greatest subscale score among the three subscale scores obtained for each cooperating teacher (supervisor). Hence, the supervision style cannot be determined if there are any missing data in the item scores, which in turn can lead to the indetermination of a subscale score.

The results showed that there are three different supervisory styles as perceived by the pre-service (trainee) teachers. In terms of relative frequencies, the results showed that Attractive Supervisory Style ($n = 45$, 49.5%) is the most frequently used supervision style as perceived by the pre-service (trainee) teachers, followed by Task Oriented Supervisory Style ($n = 21$, 23.1%), and Interpersonally Sensitive Supervisory Style ($n = 15$, 16.5%). Finally, ten (11%) cooperating teachers' supervisory styles could not be determined due to incomplete data.

Relationship Between Satisfaction with Supervisor and Supervisory Styles

Research question 3 is concerned with the issue of whether these different supervisory styles are correlated with supervisees' satisfaction with their supervisors. The results revealed that all three different supervisory styles were significantly correlated with "satisfaction with supervisor" (See Table 2). Using the guidelines provided by Cohen (1988) and Matthews, Zeidener, & Roberts (2002) for interpreting the magnitude of these correlation coefficients, the strength of these correlational relationships were found to be very robust. First, the magnitude of the correlation coefficient between Attractive Supervisory Style ($r = .828$, $p < .001$) as well as between Interpersonally Sensitive Supervisory Style ($r = .703$, $p < .001$), and "satisfaction with supervisor" are both considered to fall into the "very large" range. Second, the magnitude of the correlation coefficient between Task Oriented Supervisory Style ($r = .629$, $p = < .001$) and "satisfaction with supervisor" is considered to fall into the "large" range.

Due to the high correlations among the supervisory styles, partial correlation coefficients were calculated to control for the overlapping variance among them when each supervisory style was correlated with satisfaction with supervisor. Each partial correlation coefficient between a supervisory style and satisfaction was calculated after partialling out the effects of the other supervisory styles due to covariance. The results became clearer with the use of partial correlational analysis. Only the Attractive Supervisory

Style ($r = .649$, $p < .001$) turned out to be significantly correlated with satisfaction, even after the effects of other supervisory styles were partialled out.

Predicting Satisfaction with Supervisor from Supervisory Styles
Research question 4 was explored using multiple standard regression. The results of multiple standard regression revealed that taken together, the three supervisory styles account for 73.4% variance in "satisfaction with supervisor". However, only the Attractive Supervisory Style significantly predicted "satisfaction with supervisor" (beta = .790; $t = 9.383$; $p < .001$).

Discussion

Relationship Among Supervisory Styles
The results showed that that even though these three supervisory styles have their own unique characteristics, they nevertheless are closely related to each other, based on the significantly large to very large correlation coefficients, which are higher than those obtained in the validation studies (Friedlander & Ward, 1984). This pattern of results probably reflect the perception of the local supervisees who perceive their supervisors as being less distinguishable in their supervisory styles (i.e., raw scores across the three subscales tended to be closer to each other), when compared to the American counterparts who are perceived their supervisors to be more distinctive in their supervisory styles (i.e., raw scores across the three subscales tended to be further from each other). In sum, Singapore's supervisors may appear to be an "all-rounder" and lack a distinctive supervisory style.

This may be due to several plausible reasons, such as insufficient supervision training, insufficient time availability, and insufficient supervision experience. Perhaps more supervision training should be mandated for co-operative teachers who are assigned by their school principals to be the supervisors of pre-service or trainee teachers assigned to the schools. Currently, cooperative teachers are invited to a practicum briefing (in which

the 3-stage clinical supervision model and other supervision-related information are provided). Apart from the training received during the practicum briefing, it is unknown how many of these cooperative teachers have undergone formal supervision training prior to or subsequent to the briefing. Furthermore, Wong and Goh (2002) concluded from their study that cooperative teachers may need to upgrade their mentoring and supervision skills to deal with the concern about the level of competencies with which the cooperative teachers mentored and assessed the trainee teachers. Secondly, cooperative teachers are not full time supervisors. They still have to teach and perform other school-related tasks. Hence, the amount of time allocated to supervision may be restricted. Finally, providing supervision may be a relatively new experience for cooperative teachers even though they may have taught many years in the schools.

Relative Perceived Prevalence of Supervisory Styles

As mentioned before, the results showed that the trainee teachers perceived their cooperative teachers to use three different supervisory styles. In terms of relative frequencies, most cooperating teachers are perceived by trainee teachers to utilize the attractive or non-directive supervisory style. The next commonly used supervisory style is the task-oriented or directive supervisory style, followed by the interpersonally-sensitive or collaborative supervisory style. This pattern of results seems to suggest that most cooperating teachers prefer to use the attractive or non-directive supervisory style, followed by the task-oriented or directive supervisory style, and the interpersonally-sensitive or collaborative supervisory style. This pattern of results is different from that obtained by McJunkin et al., 1998). They found that most supervisors are reported by preservice teachers to use the collaborative (interpersonally sensitive) supervisory style, followed by directive (task-oriented) supervisory style and nondirective (attractive) supervisory style respectively.

The perceived dominance of the attractive (non-directive or S4) supervisory style among cooperative teachers appears to be a concern at first

sight. This is because this style has been mistakenly been criticized as a laissez faire type of supervision, which advocates minimal supervisor's involvement as well as responsibility (Glickman et al., 2001, 2004). However, Glickman et al. (2001, 2004) and Ralph (2002, 2003) argue that the nondirective supervisory style and the S4 supervisory style should not be interpreted as being equivalent to laissez faire permissiveness. This is because the supervisor is still actively involved in the supervision process, engaging in supervisory behaviors like clarifying, encouraging, reflecting, facilitating, and empowering.

A number of plausible explanations for the perceived dominant use of the attractive supervisory style could be offered. First, attractive supervisory style may be suitable for cooperative teachers who tend to be very busy. Second, the duration of teaching practice practicum tends to be about one semester long. Even for non-graduate trainee teachers who have to do two semesters of teaching practice practicum, they may not be assigned back to the same school or the same cooperative teacher. This is because work schedules and roles for all parties tend to be very tight and frequently change. This may also explain why the interpersonally-sensitive supervisory style is less frequently used, since it is the most demanding of the three supervisory styles in terms of supervisor's role difficulty and relationship duration. Third, supervisors may also sense that the supervisees prefer the attractive supervisory style based on past experience.

Correlational and Predictive Relationship Between Satisfaction with Supervisor

The present study revealed that similar to the teachers (including pre-service or trainee teachers, beginning or entry-level teachers, and experienced teachers) in the American studies (Glickman, 1985; Glickman et al., 2001, 2004; McJunkin et al., 1998), NIE trainee teachers' preferences for different supervisory styles vary.

The present study also found that all supervisory styles correlated significantly with satisfaction with supervisor in varying degree of strength

(i.e., attractive or nondirective supervisory style has the strongest correlation with satisfaction with supervisor, followed by interpersonally-sensitive or collaborative supervisory style, and task-oriented or directive supervisory style). After controlling for the effects of high correlation among the three supervisory styles, only the attractive or nondirective supervisory style is significantly related to satisfaction with supervisor. Moreover, only the attractive or nondirective supervisory style can significantly predict satisfaction with supervisor. The other two supervisory styles cannot significantly predict satisfaction with supervisor.

Hence, based on the correlational and regression results, it appears that most NIE trainee teachers prefer the attractive or nondirective supervisory style. This pattern of results is different from the pattern of results obtained in the American studies. The Americans found that most trainee teachers preferred the directive (task-oriented) supervisory style (Copeland, 1980; Copeland & Atkinson, 1978; Lorch, 1981; Vudovich, 1976; Zonca, 1973; as cited in Glickman et al., 2001, 2004) or collaborative (interpersonally) sensitive supervisory style (McJunkin et al., 1998).

The finding that attractive or nondirective supervisory style is significantly correlated with satisfaction with supervisor (even after partialling out the influence of other supervisory styles) as well as significantly predicting satisfaction with supervisor is not expected based on past empirical findings and theoretical literature. Past studies in supervision in many professions (e.g., teaching, psychology, occupational therapy, social work, and speech pathology) (Copeland, 1980; Copeland & Atkinson, 1978; Glickman, 1985; Glickman et al., 2001, 2004; Lorch, 1981; Spence, Wilson, Kavanagh, Strong, & Worrall, 2001; Vudovich, 1976; Zonca, 1973) found that in general, relatively inexperienced practitioners tend to prefer the directive styles of supervision (e.g., task-oriented supervisory style), rather than unstructured approaches to supervision (e.g., attractive supervisory style and interpersonally-sensitive supervisory style).

A number of possible explanations could be offered for this unexpected finding. One possible explanation is that the attractive or nondirective

supervisory style offers relatively more flexibility, friendliness, openness, positivity, support, trust, and warmth — which may be more welcoming for trainee teachers who need a higher comfort level, more freedom, warmth, and safety, and less structure. There is some empirical support for this explanation. Zepeda and Ponticell (1998) examine the perspectives of 114 elementary and secondary teachers regarding what they need, want and get from supervision. They found that that within the category of "Supervision at Its Best," the subcategories were (a) supervision as validation, (b) supervision as empowerment, (c) supervision as visible presence, (d) supervision as coaching, and (e) supervision as a vehicle for professionalism. Within the category of "Supervision at Its Worst," the subcategories were (a) supervision as a dog and pony show, (b) supervision as a weapon, (c) supervision as a meaningless/invisible routine, (d) supervision as a fix-it list, and (e) supervision as an unwelcome intervention. It is conceivable that the trainee teachers may share some of these sentiments, which make them attracted to the attractive supervisory style.

A second related reason is that in general, many Singaporeans have been said to be relatively more sensitive to criticism or feedback; they tend to be perfectionist to have performance anxiety; and are result-oriented (e.g., grade-conscious); are insecure; are afraid of failure ("Kiasuism"); and are face-conscious (e.g., rank/status-conscious) (Ng, 2001). Hence, a task-oriented or directive supervisory style may be too threatening to the Singapore's trainee teachers, since mistakes will be pointed out directly during the supervision process, which may inevitably affect grades.

Alternatively, a third plausible explanation is that many of the Singapore's trainee teachers in this study may be relatively more confident, autonomous, competent, explorative, committed, and conceptually sophisticated in comparison to the American counterparts. For example, Atputhasamy (2004) found in his survey of 72 trainee teachers that majority (71%) wanted their cooperative teachers to provide them with the independence to try out new innovative teaching approaches. This may explain

their readiness for the preference of the attractive or nondirective supervisory style which is usually found to be the first and second preference of experienced teachers in the American studies (e.g., Blumberg, 1980; Blumberg & Weber, 1968; Ginkel, 1983; Glickman, 1985; Glickman et al., 2001, 2004).

Even though collaborative or interpersonally-sensitive supervisory style has a higher correlation coefficient with satisfaction with supervisor when compared to the directive or task-oriented supervisory style, it is a less frequently used supervisory style when compared to the directive or task-oriented supervisory style in this sample. Theoretically, this style is more suitable for supervisees who are moderate in commitment, moderate in conceptual and abstract thinking, low in confidence, and high in competence (Glickman et al., 2001, 2004; Ralph, 2002, 2003).

Moreover, the collaborative or interpersonally-sensitive supervisory style is also more suitable for supervisory relationships that are more long-term and mature in nature. This style also require more time and is quite demanding, since it is more difficult to be highly supportive and less task oriented at the same time. As mentioned above, the duration of the practicum tends to be short — for a few months. Hence, it is not easy to develop and commit to a relationship and its associative demands during this period for both supervisees and supervisors.

Limitations

Even though the results of the present study are quite straight forward, they should be viewed within the constraints of the limitations of the study. For example, one major limitation of the current study is the relatively small sample size used in the study, due to difficulty in recruiting NIE supervision coordinators. Second, the participants were not randomly selected from all the NIE trainee teachers available during the practicum period. Hence, the generalizability of the results is unknown. Third, each trainee teacher was asked to rate all their co-operative teachers assigned to them by the schools, resulting in multiple ratings by some raters. Finally, the third limi-

tation is that the data collected for inferring supervisory style is based on perception of the trainee teachers only.

It is acknowledged that future research may be able to overcome some of the above mentioned limitations. For example, the problem of multiple ratings by the same raters could be resolved by randomly selecting only one cooperative teacher for those trainee teachers who are assigned more than one cooperative teacher, provided there is a larger sample size to begin with. The inclusion of cooperative teachers in future research could also overcome of the limitation of only depending on the trainee teachers to provide the ratings on the supervisory styles.

Implications

Within the constraints of the limitations of the study, patterns of results taken together appear which have several implications to the research and practice of instructional or teaching supervision. First, the attraction of the attractive supervisory style should be viewed within the context of the developmental needs of the supervisees, and not merely used because it was found to be the most satisfied and hence preferred supervisory style. In fact, research (e.g., Ladany & Lehraman-Waterman, 1999; Ladany, Walker, & Melincoff, 2001; Steward, Breland, & Neil, 2001) have found that each of the three supervisory styles have their strengths and weaknesses depending on the circumstances and needs surrounding their use.

Hence, no one supervisory style should be used for all teachers. Supervisors should be comfortable with a diverse number of styles (Ladany, Marotta, & Muse-Burke, 2001). Moreover, the selection of a particular supervisory style for initial entry into a supervisory relationship should be based on multiple factors, such as, teacher characteristics (e.g., supervisee's preference, developmental level, and teaching experience), pedagogical rationale, institutional preference, context, and circumstances. The supervisor should also be flexible in switching to and using other supervisory styles when the circumstances or needs change (Glickman, 1995; Glickman et al., 2001, 2004; Ladany, Marotta, & Muse-Burke, 2001; McJunkin et al., 1998;

Ralph, 2002, 2003). In fact, Ladany, Walker, and Melincoff (2001) found that all three supervisory styles are needed to facilitate the development of a strong supervisory working alliance.

Finally, more research should be conducted to better understand the way supervisory style impact supervision. For example, studies of teachers with more experience (entry-level or beginning teachers and experienced teachers) and supervisors themselves may yield additional information about the use of supervisory styles.

Conclusion

Putting the different sets of results together, one can safely conclude that the trainee teachers (supervisees) in the current study's sample have different preferences for supervisory styles compared to the American trainee teachers. These preferences reflect that: (a) most cooperating teachers are perceived by the trainee teachers to use the attractive or nondirective supervisory style; and (b) the trainee teachers feel more satisfied with supervisors who are flexible, friendly, open, positive, supportive, trusting, and warm (attractive or nondirective supervisory style).

Echoing the sentiments of Glickman et al. (2001, 2004), the current findings on teachers' preference for supervisory approach or style must be viewed with caution, even though they may be informative for supervisory practice. Despite the fact that the attractive (non-directive or S4) supervisory style does not encourage laissez faire permissiveness, three points need to be noted when using this supervisory style. First, novice supervisors need to be careful and should receive proper supervision training so that they do not mistaken nondirective supervision as laissez faire supervision. Second, nondirective supervision is developmentally more appropriate for supervisees who are high in commitment, high in conceptual and abstract thinking, high in confidence, and high in competence (Glickman et al.; Ralph, 2002, 2003) and should not be used when the supervisees are not developmentally ready. Third, the author agrees with McJunkin, Justen, Strickland, and Justen (1998)

and Glickman (1995) that "different supervisory approaches are needed, depending on the level of development of the person being supervised" (p. 251). Hence, it is not advisable for supervisors to use just one supervisory style throughout the supervision cycle. It is a much better practice if supervisors use a variety of supervisory styles throughout the supervision cycle, depending on the developmental needs and preferences of their supervisees, conjointly together with other relevant selection factors.

References

Acheson, K., & Gall, M. (1997). *Techniques in the clinical supervision of teachers* (4th ed.). New York: Longman.

Acheson, K., & Gall, M. (2003). *Clinical supervision and teacher development: Preservice and inservice applications.* New York: Wiley.

Atputhasamy, L. (2004). Student teachers' expectation from cooperating teachers during practicum. *The NIE Researcher, 4,* 4–5.

Beach, D. M., & Reinhartz, J. (2000). *Supervisory leadership: Focus on instruction.* Boston: Allyn & Bacon.

Bittel, L. R., & Newstrom, J. W. (1990). *What every supervisor should know* (6th ed.). New York: McGraw-Hill.

Blumberg, A. (1980). *Supervisors and teachers: A private cold war* (2nd ed.). Berkeley, CA: McCutchan.

Blumberg, A., & Weber, W. A. (1968). Teacher morale as a function of perceived supervisor behavioral style. *Journal of Educational Research, 62,*109–113.

Boyan, N. J., & Copeland, W. D. (1978). *Instructional supervision training program.* Columbus, OH: Charles E. Merrill.

Cogan, M. (1973). *Clinical supervision.* Boston: Houghton Mifflin.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.

Copeland, W. D. (1980). Affective disposition of teachers in training toward examples of supervisory behavior. *Journal of Educational Research, 74,* 37–42.

Copeland, W. D., & Atkinson, D. R. (1978). Student teachers' perceptions of directive and nondirective supervision. *Journal of Educational Research, 71,* 123–127.

Costa, A., & Garmston, R. (1994). *Cognitive coaching: A foundation for the renaissance school.* Norwood, MA: Christopher Gordon.

Costa, A., & Garmston, R. (2002). *Cognitive coaching: A foundation for the renaissance school* (2nd ed.). Norwood, MA: Christopher Gordon.

Friedlander, M. L., & Ward, L. G. (1984). Development and validation of the Supervisory Styles Inventory. *Journal of Counseling Psychology, 31*(4), 537–541.

Ginkel, K. (1983, April). *Overview of study that investigated the relationship of teachers' conceptual levels and preferences for supervisory approach.* Paper presented at the annual meeting of the American Educational Research Association, Montreal.

Glatthorn, A. (1990). *Differentiated supervision.* Alexandria, VA: Association for Supervision and Curriculum Development.

Glatthorn, A. (1997). *Differentiated supervision* (2nd ed.). Alexandria, VA: Association for Supervision and Curriculum Development.

Glickman, C. D. (1985). *Supervision of instruction: A developmental approach.* Boston: Allyn & Bacon.

Glickman, C. D., Gordon, S. P., & Ross-Gordon, J. M. (2001). *Supervision and instructional leadership: A developmental approach* (5th ed.). Boston: Allyn & Bacon.

Glickman, C. D., Gordon, S. P., & Ross-Gordon, J. M. (2004). *Supervision and instructional leadership: A developmental approach* (6th ed.). Boston: Allyn & Bacon.

Goldhammer, R. (1969). *Clinical supervision: Special methods for the supervision of teachers.* New York: Holt, Rinchart, & Winston.

Goldhammer, R., Anderson, R. H., & Krajewski, R. J. (1993). *Clinical supervision: Special methods for the supervision of teachers* (3rd ed). New York: Holt, Rinehart & Winston.

Hersey, P., & Blanchard, K. (1988). *Management of organizational behavior: Utilizing human resources* (5th ed.) Englewood Cliffs, NJ: Prentice Hall.

Humphrey, G. L. (1983). The relationship between orientations to supervision and the developmental levels of commitment and abstract thinking of entry-level teachers. (Doctoral dissertation, University of Tulsa, 1983). *Dissertation Abstracts International, 44*, 1644A.

Ladany , N., & Lehraman-Waterman, D. E. (1999). The content and frequency of supervisor self-disclosures and their relationship to supervisory style and

the supervisory working alliance. *Counselor Education and Supervision, 38*, 143–160.

Ladany, N., Marotta, S., & Muse-Burke, J. L. (2001). Counselor experience related to complexity of case conceptualization and supervision preference. *Counselor Education and Supervision, 40*, 203–219.

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.

Matthews, G., Zeidener, M., & Roberts, R. D. (2002). *Emotional intelligence: Science and myth.* Cambridge, MA: MIT Press.

McJunkin, M. A., Justen, J. F., Strickland, H., & Justen, S. (1998). Supervisory styles preferred by student teachers. *The Clearing House, 71*, 248–250.

Ng, A. K. (2001). *Why Asians are less creative than westerners?* Singapore: Prentice Hall.

Oliva, P. F., & Pawlas, G. E. (2001). *Supervision for today's schools* (6th ed.). New York: Wiley.

Ralph, E. G. (2002). Mentoring beginning teachers: Findings from contextual supervision. *Journal of Personnel Evaluation in Education, 16*, 191–210.

Ralph, E. G. (2003). Enhancing mentorship in the practicum: Improving contextual supervision. *McGill Journal of Education, 38*, 28–48.

Servgiovanni, T., & Starratt, R. (1998). *Supervision: A redefinition* (6th ed.). New York: McGraw-Hill.

Sharpe, L., Ngoh, M. S., Crawford, L., & Gopinathan, S. (1994). *Teacher supervision patterns and discourse.* Singapore: National Institute of Education.

Shiveley, J. M., & Poetter, T. S. (2002). Exploring clinical, on-site supervision in a school-university partnership. *The Teacher Educator, 37*, 282–301.

Sparks-Langer, G. M., & Colton, A. B. (1991). Synthesis of research on teachers' reflective thinking. *Educational Leadership, 48*, 37–44.

Spence, S. H., Wilson, J., Kavanagh, D., Strong, J., & Worrall, L. (2001). Clinical supervision in four mental health professions: A review of the evidence. *Behavior Change, 18*, 135–155.

Steward, R. J., Breland, A., & Neil, D. M. (2001). Novice supervisees' self-evaluations and their perceptions of supervisor style. *Counselor Education and Supervision, 41*, 131–141.

Waite, D. (1995). *Rethinking instructional supervision: Notes on its language and culture.* London: Falmer Press.

Webster's New World Dictionary of the American Language. (1998). New York: Simon & Schuster.

Wong, A. F. L., & Goh, K. C. (2002). The practicum in teacher training: A preliminary and qualitative assessment of the improved National Institute of Education-School Partnership Model in Singapore. *Asia-Pacific Journal of Teacher Education, 30,* 197–206.

Wong, S. S. (2002). Clinical supervision in professional psychology. In A. G. Tan & M. Goh (Eds.), *Psychology in Singapore: Issues of an emerging discipline* (pp. 102–123). Singapore: McGraw-Hill.

Zonca, P. H. (1973). A case study exploring the effects on an intern teacher of the condition of openness in a clinical supervisory relationship (Doctoral dissertation, University of Pittsburgh, 1973). *Dissertation Abstracts International, 33,* 658–659A.