



## Antecedents to supportive supervision: An examination of biographical data

Samantha C. Paustian-Underdahl<sup>1\*</sup>, Linda R. Shanock<sup>2</sup>, Steven G. Rogelberg<sup>2</sup>, Cliff W. Scott<sup>2</sup>, Logan Justice<sup>2</sup> and David G. Altman<sup>3</sup>

<sup>1</sup>Department of Management & Marketing, Culverhouse College of Commerce and Business Administration, University of Alabama, Tuscaloosa, Alabama, USA

<sup>2</sup>Organizational Science, The University of North Carolina at Charlotte, North Carolina, USA

<sup>3</sup>The Center for Creative Leadership, Greensboro, North Carolina, USA

The purpose of this study was to contribute to the limited body of knowledge of antecedents to supervisor support by utilizing the ecology model to explore the biographical information that differentiates highly supportive supervisors from those who are less supportive. We analysed qualitative biographical data from 65 supervisors rated as highly supportive and 63 supervisors rated as less supportive by their subordinates, comparing and contrasting their personality characteristics, work experiences, and life experiences. We found that highly supportive supervisors were more likely to see themselves as being warm and sociable, to think that their communication and leadership skills were their key strengths, and they were more involved in a variety of social and professional groups than less supportive supervisors. Supportive supervision is one way organizations can inexpensively work to build the job skills, abilities, and the interpersonal skills of organizational members. On the basis of the findings of this study, we propose some ways in which an organization can hire and develop supervisors to be more supportive.

### Practitioner points

- Utilizing the ecology model as a framework, potential antecedents to supervisor supportiveness are examined.
- Implications for research and practice related to developing and selecting for supportive supervision are discussed.

In today's dynamic global economy, human capital is viewed as a competitive resource by organizations, and effective supervision of individuals within the workplace has become critical to business success (Ipe, 2003; O'Neill & Adya, 2007). Supportive supervision – subordinates' perceptions of the degree to which supervisors value their contributions and care about their personal and professional needs and well-being – is an important way that supervisors can help employees succeed in today's business environment (Kottke & Sharafinski, 1988; Rhoades & Eisenberger, 2002). Benefits of having supportive

\*Correspondence should be addressed to Samantha Paustian-Underdahl, Department of Management & Marketing, Culverhouse College of Commerce and Business Administration, University of Alabama, Box 870225, Tuscaloosa, AL 35487-0225, USA (e-mail: spaustian@cba.ua.edu).

supervisors in the workplace include enhanced job performance, satisfaction, collaboration, and organizational commitment for subordinates, as well as reduced turnover intentions (e.g., Raabe & Beehr, 2003; Scandura & Williams, 2004; Sosik & Godshalk, 2000; Vangen & Huxham, 2003).

Given the importance of supportive supervision, it is surprising how little is known about the factors that may play a role in supervisors' supportiveness. Supportive supervision, like most forms of leader behaviour, is traditionally viewed as an independent variable exerting influence on employees and the organization overall (Bass, 1996). However, if we are to understand how to influence, improve or modify supportive workplace behaviour, we must shift our focus 'upstream' towards the study of supportive supervision as a dependent variable. The little research that has been conducted in this area has primarily examined antecedents related to the organization (e.g., Eisenberger, Stinglhamber, Vandenberghe, Sucharski, & Rhoades, 2002) or the subordinate (e.g., Richard, Ismail, Bhuiyan, & Taylor, 2009) rather than studying how characteristics of the supervisor may lead to supportive behaviours. Yet, to effectively develop supervisors to be more supportive, it is important to consider how their personal characteristics and life and work experiences may play a role in their supportiveness.

In the current study, we fill a gap in the literature by examining aspects of supervisors' biographical data (biodata) – factual kinds of information about life and work experiences, as well as items involving opinions, values, beliefs, and attitudes of individuals (Lautenschlager, 1994 as cited in Kuschneret, 2001) – to begin to build our understanding of potential antecedents to supervisors' supportive behaviours. Biodata have been shown to demonstrate high predictive validity for a variety of job behaviours and performance (e.g., Hunter & Hunter, 1984; Russell, Mattson, Devlin, & Atwater, 1990). The most widely cited and well-developed explanation for biodata's usefulness in predicting future behaviour comes from the ecology model that describes causally recursive sequences of life events as a learning process (Mumford, Stokes, & Owens, 1990). We draw on the body of literature that applies the ecology model to the development of leadership and mentoring skills through personal characteristics and life and work experiences to better understand what factors may contribute to supervisors' supportiveness (Day & Halpin, 2004; DeRue & Wellman, 2009; Eby, 1997; Lord & Hall, 2005; Mumford, Zaccaro, Harding, Jacobs, & Fleishman, 2000).

### **Supportive supervision**

Supportive supervision has been of interest since the early studies on leadership in which leader consideration and relations-oriented behaviour were considered to be a component of two broadly defined leadership behaviour categories: Task-oriented and relations-oriented behaviour (e.g., Fleishman, 1953). More recently, however, supportive supervision was recognized in current conceptualizations of leadership such as transformational leadership theory in which individualized consideration is one of several transformational leader behaviours (Alimo-Metcalfe & Alban-Metcalfe, 2001). Individualized consideration involves a supervisor's efforts in developing their followers' potential and in paying attention to their subordinates' needs for achievement and growth (Bass, 1996). Although supportive supervision can be classified as a dimension of individualized consideration, supportive supervisor behaviours also reflect other types of leadership behaviours, as discussed below.

Supportive supervision has received extensive attention in a variety of different research areas, including the leadership (e.g., Yukl, 2001), social support (e.g., House,

1981) and mentoring fields (e.g., Allen, Eby, Poteet, Lentz, & Lima, 2004; Eby, 1997). Yukl's guidelines for supporting suggest that supportive supervisors 'act friendly and considerate, are patient and helpful, show sympathy and support when someone is upset or anxious, listen to complaints or problems, and look out for others' interests' (2001, p. 60). Supportive supervision has also been described as encompassing a variety of behaviours that include relations-oriented behaviours and showing concern for the psychosocial and job-related needs and well-being of subordinates (Kram, 1985; Yukl, 2001). Relations-oriented behaviours are primarily concerned with improving relationships and helping people, enhancing cooperation, and building identification with the organization (Yukl, 2001). Supportive supervision has also been considered to be one type of social support, which may help buffer the negative effects of stress and strain for employees (House, 1981). House (1981) defined a supportive leader as one who provides emotional, informational, instrumental, and appraisal support to followers.

In addition to being featured in research examining leadership and social support, the supervisor-subordinate relationship is also included in the mentoring literature (Bass, 1990; Scandura & Schriesheim, 1994). Researchers have considered supervisor support to be a hierarchical mentor-protégé type of mentoring relationship (Eby, 1997). Such forms of mentoring enable the supervisor to act as a role model for subordinates, facilitating their learning, job-related competence, and psychosocial well-being (Eby, 1997). In the present study, we capture the various definitions and descriptions of supportive supervision described above by adopting a broad, hybrid definition adapted from the definition of perceived organizational support (Kottke & Sharafinski, 1988). Supportive supervision is defined as subordinates' perceptions of the degree to which supervisors value their contributions and care about their personal and professional needs and well-being (Kottke & Sharafinski, 1988; Rhoades & Eisenberger, 2002).

### ***Differentiators of highly supportive and less supportive supervisors***

#### *The ecology model and biodata*

In their review of the ecology model, Mumford *et al.* (1990) explained that individuals possess hereditary and environmental factors that shape their choices throughout life. The model proposes that individuals create life trajectories that are self-reinforcing and that can be used to predict future behaviours and performance (Stokes, Mumford, & Owens, 1989, p. 512). The result of these trajectories is a personal niche of similar activities for which an individual develops self-reinforcing knowledge, skills, and behaviours (Mumford & Owens, 1984; Stokes *et al.*, 1989). As Stokes *et al.* (1989, p. 542) proposed, over time, 'individuals...become more like themselves' as they repeatedly self-select into similar experiences and patterns of behaviour.

The ecology model has been applied to organizational contexts with the use of biodata for employee selection and development. Based on the ecology model, Nickels (1990) developed a framework of three biodata dimensions that can be used to predict future employee success – personal characteristics, social resources, and intellectual resources. Building on this literature, researchers have found that biodata including individuals' values, attitudes, beliefs, and past experiences that capture developmental processes are related to important future behaviours and outcomes (e.g., Kuhnert & Russell, 1990). Indeed, biodata have a rich history as a useful tool in employee selection and have been shown to be predictive of absenteeism, proficiency ratings, delinquency, substance

abuse, promotion, achievement, accidents (Stokes & Cooper, 1994), turnover (Barrick & Zimmerman, 2005), customer service orientation (Allworth & Hesketh, 2000), as well as team performance and safety performance (Hough & Paullin, 1994; Hunter & Hunter, 1984; Mumford & Owens, 1982; Stokes & Cooper, 1994). In addition to using biodata in hiring contexts, many researchers have pointed to the potential usefulness of biographical data to examine antecedents to leadership behaviours (e.g., Avolio, 1994; Bass, Avolio, & Goodheim, 1987; Becton, Matthews, Hartley, & Whitaker, 2009). On the basis of this literature, in the current study, we utilize the ecology model to examine how biodata may differentiate highly supportive supervisors from those who are seen as less supportive.

### *Personal characteristics*

Consistent with the ecology model, research has identified consistent associations between specific traits and the emergence of different supervisor behaviours (Judge & Bono, 2000; Lord, De Vader, & Alliger, 1986). For instance, in the mentoring domain, research examining correlates of mentoring has focused on demographic variables such as mentor and protégé gender or race (Allen, 2003). Additionally, prosocial personality variables like other-oriented empathy and helpfulness have been shown to be related to supervisor's willingness to serve as mentors (Allen, 2003). Others have argued that managerial skill development depends on manager's abilities to learn as they interact with their environments (Lerner & Tubman, 1989).

Mumford, Wesley, and Shaffer (1987) hypothesized that, over time, individuals 'manifest an internally consistent pattern of environmental transactions resulting in systematic activity selections and formation of a stable developmental trajectory' (p. 294). Formation of a pattern of environmental interaction was said to lead to a stable style for adaptability and learning. Developing the ability to support subordinates may depend on personality-related characteristics that influence supervisor's abilities to learn and adapt from their experiences with others. This point is supported in the literature on management derailment factors where characteristics, such as tactlessness, a lack of openness, and cockiness, act to inhibit both learning and the opportunity to learn through interactions with others (Kaplan, Drath, & Kofodimos, 1991; Lombardo, Ruderman, & McCauley, 1988). However, there are other characteristics, such as intellectual openness and humility that may promote learning through interaction and may contribute to the development of supportive leadership skills (Schooler, 1984). Thus, in the current study, we aim to assess the personality-related characteristics that may differentiate highly supportive supervisors from less supportive supervisors.

However, understanding predictors of supportive supervision may be more extensive than just learning about the personality-related characteristics of these supervisors. According to the ecology model, a variety of career and life experiences can influence a supervisor's motivation, identity, personality, and social skills, which then in turn influence the supervisor's behaviours and performance in the workplace (Mumford *et al.*, 2000). Indeed, researchers have argued that leadership may involve a more complex combination of behavioural, cognitive, and social skills that may require different learning experiences (Day & Halpin, 2004; Lord & Hall, 2005; Mumford *et al.*, 2000). This management development perspective argues that experiences which build a supervisor's social identity and managerial skills are essential antecedents to management success.

*Work and life experiences*

Consistent with the ecology model, the environmental opportunities to which supervisors are exposed exert an influence on the development of supervisor behaviours. A study by McCauley, Ruderman, Ohlott, and Morrow (1994) indicates that exposure to assignments or new experiences presenting challenging problems promotes the development of management skills by stimulating creative problem-solving and other leadership skills. Additionally, supervisors may develop multiple social identities based on the groups and activities in which they are regularly exposed to and involved in within or outside of the workplace, which may contribute to their supportiveness at work. Lord and Hall (2005) argue that social identity is especially critical in impacting leader behaviours because it provides a structure for how relevant knowledge can be organized and it can provide access to personal capital (i.e., stories, core values) that can be used to understand and motivate subordinates. On the basis of these findings, we argue that there may be a variety of life and work experiences that can serve to impact supervisor's supportive behaviours and skills. Thus, we aim to explore supervisors' life and work experiences to understand how these may differentiate highly supportive supervisors from those who are seen as less supportive.

On the basis of the ecology model and the literature presented above which argue that attributes and experiences which build a leader's social identity and skills are essential antecedents to leadership success, we conducted an exploratory content analysis of supervisory biographical data to better understand the personal characteristics and life and work experiences that may differentiate highly supportive supervisors from less supportive supervisors.

*Research Question 1:* How do the personal characteristics, life experiences, and work experiences of highly supportive and less supportive supervisors differ?

## Method

### *Participants and procedure*

The participants consisted of 128 supervisors who were part of a larger sample of 598 supervisors who participated in week-long leadership development programmes during a 1-year period. Each programme consisted of approximately 24 participants. We received data on these participants and conducted our analyses after all of them had completed the programme. We use the general term of 'supervisors' to represent all of our participants who were largely middle managers from a diverse array of organizations, industry sectors, and functional areas in the United States. The data were collected using a multirater feedback instrument called Benchmarks™ (CCL, 2004) and a biographical data form. The supervisors were asked to list the names and email addresses of their subordinates, and these individuals were contacted to complete the feedback instrument prior to the beginning of the leadership programme. They were told that the feedback would be used for developmental and research purposes only.

The sample of supervisors was comprised primarily of men (71.4%) and Caucasians (76.6%), and their average age was 43.0 ( $SD = 7.33$ ). Of the 598 supervisors in the full sample, 128 were rated as highly supportive or less supportive and were retained for this study. As suggested in MacCallum, Zhang, Preacher and Rucker (2002), supervisors were considered highly supportive if their scores were at least one standard deviation above the mean of supportiveness and they were considered less supportive if they scored at least

one standard deviation below the mean on supportiveness (unstandardized  $M = 3.85$ ,  $SD = .52$ ). Categorizing the supervisors in this way resulted in 65 individuals in the highly supportive group and 63 in the less supportive group. The demographic characteristics (i.e., gender, age, level, tenure) of the 128 participants in the retained sample were very similar to those of the overall sample. We chose to reduce our sample for the qualitative analyses due to the considerable amount of time and effort involved in content analytic procedures and to aid the focus on potential experiences and characteristics that may differentiate more supportive from less supportive supervisors. The typed responses from the 128 supervisors included in the qualitative analysis filled 290 double-spaced pages and included 69,829 words.

## Measures

### Supportiveness

Benchmarks™ is a widely used multirater feedback instrument (e.g., Lombardo & McCauley, 1994) that captures ratings from supervisors and from their subordinates, peers, and bosses. The development of Benchmarks™ is described by McCauley and Lombardo (1990). We used portions of the Benchmarks™ instrument to assess supervisor supportiveness. Although validated measures of supervisor support constructs exist, such measures were not part of this development programme. As a result, we created a measure from the existing 115 items of Section 1 of Benchmarks™ that were conceptually linked with our definition of supervisor support. This review resulted in 25 relevant items of supervisor-related support functions. Then, to assess content validity, a survey was given to subject matter experts (SMEs) – doctoral students and professors conducting research on leadership and organizational behaviour – to identify which of the 25 items most closely measured perceived supervisor support.

These SMEs were provided with a descriptive statement that included several relevant definitions and scales of supervisor support from the literature, as well as our own hybrid definition: Subordinates' perceptions of the degree to which supervisors value their contributions and care about their personal and professional needs and well-being (Kottke & Sharafinski, 1988; Rhoades & Eisenberger, 2002). They then rated each Benchmarks™ item on a 5-point scale as to how well it measured perceived supervisor support (1 = *not at all* to 5 = *to a very great extent*). Seven items were selected for our measure because they received a mean score of four or greater, meaning that they reflected items commonly used to measure supervisor supportiveness 'to a great extent or to a very great extent'. These seven items include, 'my supervisor: Is willing to delegate important tasks; coaches employees in how to meet expectations; is sensitive to signs of overwork in others; shows interest in the needs, hopes, and dreams of others; listens to employees; develops employees by providing challenge and opportunity; and actively promotes his/her subordinates'. Scale reliability was  $\alpha = .90$ . Principal axis factor analysis generated one factor with an eigenvalue greater than 1, explaining 63.2% of the variance. Item loadings ranged from .66 to .83.

We used subordinate ratings of these supervisor supportiveness items from Benchmarks™ because the most meaningful data in terms of supportive behaviours are from the perspective of followers or subordinates (Bass, 1990). Subordinates of each supervisor rated the extent to which their supervisor displayed these seven supportive behaviours on a 5-point Likert-type scale (1 = *not at all* to 5 = *to a very great extent*). The ratings from each supervisor's subordinates were averaged and aggregated. An average of 3.66 subordinates (range 2–11) rated each supervisor on supervisor supportiveness. The



subordinate raters were primarily men (61.4%) and Caucasians (70.9%), and the average age of the subordinates was 42.64 ( $SD = 9.85$ ). We calculated  $rwg(j)$  (James, Demaree, & Wolf, 1984) for within-group homogeneity for each supervisor rated ( $rwg(j) > .70$ ; average = .93). We also calculated ICC(2) to provide an estimate of the reliability of the group means (.89 for the present study), which was similar to other studies using similar multisource data (e.g., Graves, Ohlott, & Ruderman, 2007). These results support aggregation of subordinate ratings.

### *Biographical data*

A biographical data form developed by the leadership development programme was used to obtain personal information from the supervisors. The supervisors completed the biographical data form prior to attending the leadership development programme. In reviewing the biographical data form, we identified several items for their potential relevance to supportiveness and for their fit with the Lautenschlager (1994) criteria of biographical data. Our selection of items included questions designed to capture details regarding the participants' personality-related characteristics: (1) their self-descriptions, (2) perceptions of how they believe they are seen by their friends, (3) perceptions of their own strengths and weaknesses, and (4) how they think others may see them differently than they see themselves. We also selected items that assessed supervisors' work experiences: (1) perceptions of how they believe they are seen by their subordinates, (2) what they have learned about themselves as a result of their job, and (3) perceptions of how these activities contribute to their development. Finally, we selected biographical data items that captured details regarding the supervisors' life experiences: (1) their club and group memberships, leisure activities, and service activities and their (2) family statuses.

### **Qualitative analysis of the biographical data**

An inductive and emic content analysis was used to explore the biographical experiences of supervisors rated as high and low in supportiveness to start to understand what factors may contribute to supportive supervision behaviours. An emic coding system was developed utilizing an open-coding protocol, which enabled the emergent themes to be developed based on the written words of the supervisors themselves. Four independent coders including the first author and three research assistants trained in qualitative data analysis carefully read all supervisors' responses for each item.

Using an open-coding protocol, the coders independently identified distinct 'thought units' or concepts within the responses that brought to mind a potential category or theme (Miles & Huberman, 1984; Strauss & Corbin, 1998). A thought unit or concept could be a word, a phrase, a sentence, or multiple sentences, but each thought unit represented a distinct and separate concept. Our unit of analysis was each participant's response to each question. As the coders continued to perform open coding independently, each compared data under examination to recently identified codes, either applying a code from their recently identified code set or revising their set by modifying or adding more categories, a process called constant comparative analysis (Strauss, 1987; Strauss & Corbin, 1998). For example, one of the items read, 'What do you think are your three strongest points?' (see Table 3). All four coders read the 128 supervisors' responses to this item. The coders independently tracked themes that they saw emerging based on the most common kinds of responses, and they gave these themes names or 'thought

units'. Using multiple researchers for open coding made use of parallel questioning and constant comparisons, enabling investigators to diminish subjectivity and bias (Corbin & Strauss, 1990).

After developing coding systems independently, the coders met to discuss the categories they identified for each item's responses, combining some and eliminating others until an agreed-upon coding scheme was developed for the responses to each item. Categories were given labels, definitions, and examples of supervisors' words that would exemplify the categories. They then counted a 1 or 0 for the presence or absence of each category within each leader's responses to items. Any discrepancies in coding a response as a 1 or 0 were discussed until the coders came to an agreement, resulting in 100% intercoder agreement. Finally, we analysed the differences in the proportion of responses between groups (comparing the highly supportive supervisors to the less supportive supervisors, as determined using the quantitative data) using chi-square tests of independence.

## Results

The means, standard deviations, and intercorrelations of the study variables are included in Table 1. The findings from the qualitative content analysis of responses to biographical data questions are listed in Tables 2–7. Although the primary goal of the analyses was to assess for directionality of the differences between groups, we used a chi-square test of independence to assess for statistically significant differences in the proportion of responses.

### Personality-related characteristics

First, we analysed supervisors' responses to questions assessing their personality-related characteristics. Significantly different themes were found for responses to the following question: 'Sometimes people misinterpret our personality. How do others see you that is

**Table 1.** Means, standard deviations, and intercorrelations of study variables

|                                | M     | SD   | 1    | 2    | 3      | 4      | 5      | 6   | 7     | 8     |
|--------------------------------|-------|------|------|------|--------|--------|--------|-----|-------|-------|
| 1. Leader Gender <sup>a</sup>  | .29   | .45  | –    |      |        |        |        |     |       |       |
| 2. Number of<br>Direct Reports | 3.66  | 1.33 | –.06 | –    |        |        |        |     |       |       |
| 3. Job Level 1 <sup>b</sup>    | .14   | .35  | .00  | .07  | –      |        |        |     |       |       |
| 4. Job Level 2                 | .16   | .37  | .05  | –.08 | –.18** | –      |        |     |       |       |
| 5. Job Level 3                 | .34   | .47  | –.04 | –.01 | –.29** | –.32** | –      |     |       |       |
| 6. Job Level 4                 | .30   | .46  | .02  | .00  | –.26** | –.29** | –.47** | –   |       |       |
| 7. Organization<br>Tenure      | 11.11 | 8.06 | .06  | .05  | .10    | –.05   | –.04   | .05 | –     |       |
| 8. Supportiveness<br>(centred) | .00   | .52  | .10* | .07  | .11**  | .01    | –.05   | .01 | .13** | (.90) |

Note.  $N = 598$ . Supportiveness was rated by subordinates. Alpha reliability is reported in parentheses on the diagonal.

<sup>a</sup>0 = male, 1 = female.

<sup>b</sup>0 = top level, 1 = first level, 2 = middle level, 3 = upper-middle level, 4 = executive.

\* $p < .05$ ; \*\* $p < .01$ .



**Table 2.** Sometimes people misinterpret our personality. How do others see you that is different from how you really think you are?

| Thought concept label<br>supervisor thinks others see them as | Definition others see supervisor as   | Examples others see supervisor as  | Highly supportive supervisors<br>N (%) | Less supportive supervisors<br>N (%) |
|---|---|--|--|--------------------------------------|
| Solemn  | Lacking personality and/or producing a dull, dark, or melancholy atmosphere | Introverted, loner, prudish, quiet   | 11 (17)                                | 19 (30)                              |
| Sociable  | Friendly and pleasant to other people                                       | Extroverted, friendly, outgoing, sociable, approachable  | 12 (18)                                | 8 (13)                               |
| Overbearing <sup>a</sup>                                      | Arrogant and tending to order people around; domineering                    | Crass, yelling, overbearing, aloof, egocentric, loud, obnoxious, direct, impatient, aggressive, hard | 19 (29*)                               | 32 (51*)                             |
| Thriving  | To be successful  | Others see me as 'all together', well thought-out, on the ball                                       | 11 (17)                                | 4 (6)                                |
| Unsure  | The leader does not know how others see them                                | I don't know how others see me, I'm unsure how they see me   | 2 (3)                                  | 4 (6)                                |
| Lacking ability <sup>b</sup>                                  | Unable to perform adequately  | Incompetent, always joking around, apathetic   | 10 (15*)                               | 2 (3*)                               |

Note. The sample size for the chi-square analyses equals 128, because this is the total number of leader responses ( $n = 65$ , highly supportive leaders and  $n = 63$ , less supportive leaders) being tested for significant differences in terms of frequency of response for each category.

<sup>a</sup> $\chi^2(1, N = 128) = 6.20, p < .02$ .

<sup>b</sup> $\chi^2(1, N = 128) = 5.61, p < .02$ .

\*Statistically significant difference.

different from how you really think you are?' (see Table 2). Frequencies that were statistically different include responses in the categories of 'overbearing' and 'lacking ability'. Highly supportive supervisors were most likely to report that others see them as 'lacking ability'. Another category of responses, 'overbearing', was statistically different between the groups. In this case, less supportive supervisors were most likely to respond that they believe they are seen as, 'overbearing'.

Other significant differences between the groups were found in responses to the items, 'What do you think are your three strongest points?' and 'What three things would you like to improve or change about yourself?' (see Tables 3 and 4). Highly supportive supervisors more frequently answered that their strengths are their 'interpersonal skills' and their 'personalities'. Another significant difference was that the less supportive supervisors were more likely to list being 'unsociable' as a weakness of theirs.

The supervisors were also asked to describe themselves using three, short phrases. While none of the response categories had significantly different frequencies between the two groups of supervisors, there were some potentially insightful differences. The highly supportive supervisors described themselves as 'sociable' and 'friendly' 30 times, while

**Table 3.** What do you think are your three strongest points?

| Thought concept label    | Definition   | Examples   | Highly supportive supervisors<br>N (%) | Less supportive supervisors<br>N (%) |
|--------------------------|--|--|--|--------------------------------------|
| Interpersonal skills     | Concerning or involving relationships between people   | People oriented, caring, supportive, listener, thoughtful                                      | 34 (52)                                | 25 (40)                              |
| Abilities                | A particular gift for doing something well   | Competencies/ technical skills, detail oriented, consider multiple perspectives, quick learner | 27 (42)                                | 31 (49)                              |
| Personality <sup>a</sup> | The distinctive or very noticeable characteristics that make somebody socially appealing               | Good humour, positive outlook on life, open minded, patient, risk taking, not easily upset     | 37 (57*)                               | 26 (41*)                             |
| Intelligence             | The ability to learn facts and skills and apply them, especially when this ability is highly developed | Creative, smart, intelligent, insightful   | 10 (15)                                | 14 (22)                              |
| Industriousness          | Hard working, conscientious, and energetic   | Committed, dedication, organized, tenacious, professionalism, accountable                      | 32 (49)                                | 31 (49)                              |

Note. The sample size for the chi-square analyses equals 128, because this is the total number of leader responses ( $n = 65$ , highly supportive leaders and  $n = 63$ , less supportive leaders) being tested for significant differences in terms of frequency of response for each category.

<sup>a</sup> $\chi^2(1, N = 128) = 3.14, p < .08$ .

\*Statistically significant difference.

the less supportive supervisors reported this characteristic 23 times,  $\chi^2(1, N = 128) = 1.23, n.s.$  In addition, the less supportive supervisors were much more likely to describe themselves as 'overworked or burnt-out'. The less supportive supervisors reported having this characteristic 18 times, while the highly supportive supervisors reported being overworked 11 times,  $\chi^2(1, N = 128) = 2.47, n.s.$

### **Work-related experiences**

Next, we analysed responses to questions relating to supervisors' workplace experiences. Statistically significant differences were found in responses to the question, 'If we were to

**Table 4.** What three things would you like to improve or change about yourself?

| Thought concept label         | Definition  | Examples  | Highly supportive supervisors<br>N (%) | Less supportive supervisors<br>N (%) |
|-------------------------------|---|---|--|--------------------------------------|
| Health                        | The general condition of the body or mind                             | Weight, exercise, eating better, balance  | 18 (28)                                | 14 (22)                              |
| Personal interests            | An activity engaged in for pleasure and relaxation during spare time  | Gaining information/ expanding understanding, politically aware, history, religion, hobbies | 19 (29)                                | 18 (29)                              |
| Technical skills              | Belonging to or involving a specialized subject, field, or profession | Abilities, time management, public speaking, networking                                     | 31 (48)                                | 32 (51)                              |
| Interpersonal skills          | Concerning or involving relationships between people                  | Conflict management, communicating with others, helping others grow                         | 37 (57)                                | 43 (68)                              |
| Being unsociable <sup>a</sup> | Stand-offish, cold  | Anger, aggressiveness, stubborn, unfriendly   | 2 (3*)                                 | 9 (14*)                              |

Note. The sample size for the chi-square analyses equals 128, because this is the total number of leader responses ( $n = 65$ , highly supportive leaders and  $n = 63$ , less supportive leaders) being tested for significant differences in terms of frequency of response for each category.

<sup>a</sup> $\chi^2(1, N = 128) = 5.12, p < .03$ .

\*Statistically significant difference.

talk to your direct reports, what would their criticisms be of you?' (see Table 5). Statistically different responses between the two groups of supervisors occurred in the category of 'communication skills'. In these responses, less supportive supervisors were most likely to report that they believe their subordinates would criticize them for their communication skills.

Other statistically different themes emerged for the item, 'What was the most important thing you learned about yourself as a result of working in this position?' (see Table 6). The highly supportive supervisors were significantly more likely to report gaining organizational insights about themselves, while the less supportive supervisors were more likely to report learning about factors they need to change or improve about themselves.

### **Life experiences**

Finally, we analysed responses to items relating to the supervisors' life experiences. There were statistically different responses to the item, 'What leisure-time activities and hobbies do you regularly engage in these days?' (see Table 7). Frequencies that were statistically

**Table 5.** If we were to talk to your direct reports, what would their criticisms be of you?

| Thought concept label             | Definition   | Examples   | Highly supportive supervisors<br>N (%) | Less supportive supervisors<br>N (%) |
|-----------------------------------|--|--|--|--------------------------------------|
| Communication skills <sup>a</sup> | The exchange of information between people               | I do not give clear directions or expectations, I am too short in conversation | 19 (29*)                               | 34 (54*)                             |
| Time management                   | Ability to meet deadlines or work at an appropriate pace | I move too fast, sails too close to major deadlines                            | 12 (18)                                | 13 (21)                              |
| Personality characteristics       | The distinctive or very noticeable characteristics       | I am goofy sometimes, I am too impatient and judge people                      | 41 (63)                                | 33 (52)                              |

Note. The sample size for the chi-square analyses equals 128, because this is the total number of leader responses ( $n = 65$ , highly supportive leaders and  $n = 63$ , less supportive leaders) being tested for significant differences in terms of frequency of response for each category.

<sup>a</sup> $\chi^2(1, N = 128) = 8.07, p < .01$ .

\*Statistically significant difference.

different include responses in the categories of exercise, self-improvement, and competitive sports. Highly supportive supervisors were most likely to report that they are involved in non-competitive exercise activities and self-improvement activities. The category of responses, competitive sports, was statistically different between the groups. In this case, less supportive supervisors were more likely to respond that they are involved in competitive sports than the highly supportive supervisors. The frequencies of some of the categories were not statistically different between the groups. Regardless of the supervisors' level of supportiveness, a similar number of supervisors in both groups reported that that they were involved in hobbies, social events, and film/television activities.

We also examined responses to the item, 'To what clubs or organizations do you belong (professional, social, political, religious, athletic)?' While there were no statistically significant differences between the groups, an interesting pattern in the responses was identified. The highly supportive supervisors were more likely to report being involved in every type of organization than the less supportive supervisors: Professional, religious, exercise-related, community, and governmental/militaristic groups. The only category for which the less supportive supervisors had a higher frequency was the 'no or none' category. The supervisors were also asked how their social activities and groups impact their personal development. There were no statistically significant differences between the groups; however, the highly supportive supervisors reported that these activities contributed to their sense of well-being 28 times, while this response occurred 21 times for the less supportive supervisors,  $\chi^2(1, N = 128) = 1.29, n.s$ . Finally, there were no statistically significant differences between the groups in whether or not they were married or single or had children or not.

**Table 6.** What was the most important thing you learned about yourself as a result of working in this position?

| Thought concept label                | Definition   | Examples   | Highly supportive supervisors<br>N (%) | Less supportive supervisors<br>N (%) |
|--------------------------------------|--|--|--|--------------------------------------|
| Positive                             | This position helped the leader recognize positive traits about themselves                   | Good leader, helps others, positive attitude, flexible   | 36 (55)                                | 38 (60)                              |
| Negative                             | This position helped the leader recognize negative traits about themselves                   | Can't do everything, drives people crazy, too aggressive, too procrastinating  | 5 (8)                                  | 9 (14)                               |
| Growth areas <sup>a</sup>            | This position helped the leader recognize areas of improvement about themselves              | Need to improve, need to be more trusting, need to listen more to others, need to multitask more                             | 10 (15*)                               | 22 (35*)                             |
| Organizational insights <sup>b</sup> | This position helped the leader gather knowledge about an organizational-specific phenomenon | I prefer to work in a field office, I learned about the performance management system here, I don't like the executive staff | 18 (28*)                               | 2 (3*)                               |

Note. The sample size for the chi-square analyses equals 128, because this is the total number of leader responses ( $n = 65$ , highly supportive leaders and  $n = 63$ , less supportive leaders) being tested for significant differences in terms of frequency of response for each category.

<sup>a</sup> $\chi^2(1, N = 128) = 6.51, p < .02$ .

<sup>b</sup> $\chi^2(1, N = 128) = 17.25, p < .001$ .

\*Statistically significant difference.

## Discussion

The primary aim of this study was to explore aspects of supervisor's biographical data to expand our understanding of the factors that play a role in supervisor supportiveness. We utilized the ecology model as a framework. Biodata have been shown to demonstrate high predictive validity for a variety of job behaviours and performance (e.g., Hunter & Hunter, 1984; Russell *et al.*, 1990). Yet, the dearth of research examining antecedents to supportive supervisions has focused narrowly on individual difference characteristics (e.g., Judge & Bono, 2000). We drew on the body of literature that applies the ecology model to the development of leadership and mentoring skills through personal characteristics and life and work experiences to better understand what factors may contribute to supervisors' supportiveness (Day & Halpin, 2004; DeRue & Wellman, 2009; Eby, 1997; Lord & Hall, 2005; Mumford *et al.*, 2000). This information is particularly useful because employees and organizations may be able to influence, improve, or modify supportive workplace behaviour by understanding the potential antecedents. Supportive supervision is one way organizations can inexpensively work to build the job skills and abilities and the interpersonal skills of organizational members. On the basis of the

**Table 7.** What leisure-time activities and hobbies do you regularly engage in these days?

| Thought concept label           | Definition  | Examples   | Highly supportive supervisors<br>N (%) | Less supportive supervisors<br>N (%) |
|---------------------------------|---|--|--|--------------------------------------|
| Exercise <sup>a</sup>           | Physical activity and movement, especially when intended to keep a person fit and healthy | Running, walking, yoga                                   | 37 (57*)                               | 22 (35*)                             |
| Hobbies                         | An activity engaged in for pleasure   | Gardening, cooking, pet activities                       | 29 (45)                                | 20 (32)                              |
| Social events                   | Interacting with others in a friendly way   | Family/friend time                                       | 29 (45)                                | 23 (37)                              |
| Film/screenplays                | Watching movies or television shows   | Television/movies  | 9 (14)                                 | 12 (19)                              |
| Self-improvement <sup>b</sup>   | An activity engaged in for pleasure that enhances something about the self                | Reading/meditation/skill based/art/music/cultural/travel | 35 (54*)                               | 22 (35*)                             |
| Competitive sports <sup>c</sup> | Competitive physical or recreational activities   | Golf, hockey, hunting, horseback riding                  | 22 (34*)                               | 40 (63*)                             |

Note. The sample size for the chi-square analyses equals 128, because this is the total number of leader responses ( $n = 65$ , highly supportive leaders and  $n = 63$ , less supportive leaders) being tested for significant differences in terms of frequency of response for each category.

<sup>a</sup> $\chi^2(1, N = 128) = 6.23, p < .02$ .

<sup>b</sup> $\chi^2(1, N = 128) = 4.64, p < .04$ .

<sup>c</sup> $\chi^2(1, N = 128) = 11.26, p < .01$ .

\*Statistically significant difference.

findings of this study, we propose some ways in which an organization can hire and develop supervisors to be more supportive.

### ***Personality-related characteristics of supportive supervisors***

By examining the written words of the supervisors in this sample, we learned that highly supportive supervisors believe others see them as lacking ability or being unable to perform their jobs to the best of their ability. This suggests that supportive supervisors may be extra hard on themselves, setting high expectations that are difficult to achieve. Interestingly, while these supervisors may set high expectations for themselves, they seem to believe that they are not seen as competent enough to achieve such challenging goals. The idea of a good leader being humble and modest has been mentioned before in the supervision literature. Collins (2001) studied 11 CEOs who had maintained above average organizational performance for 15 years. He found that these 11 CEOs all shared similar characteristics; they were modest and humble, as opposed to self-dramatizing and self-promoting.

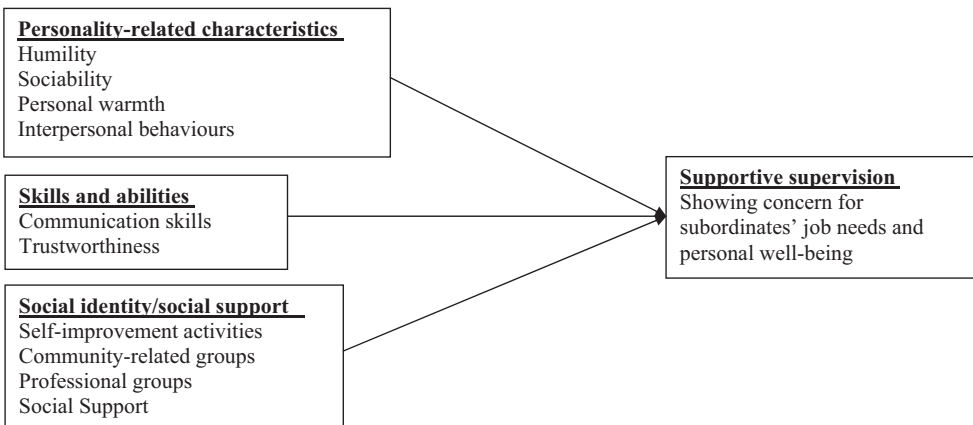
We also learned that less supportive supervisors were more likely to report that others see them as overbearing, arrogant, and aggressive. These characteristics are similar to



supervision derailment characteristics, which have been shown to inhibit both learning and the opportunity to learn through interactions with others (Kaplan *et al.*, 1991; Lombardo *et al.*, 1988). To reduce these negative perceptions and implications, supervisors should encourage feedback and input from subordinates (Sagie, Elizur, & Koslowsky, 1995). They should try to increase their openness to receiving and learning from the feedback they hear from others in the workplace. Perhaps, 360-degree developmental surveys can be used to increase supervisors' awareness and acceptance of feedback.

We also learned what these supervisors believe are their strengths and weaknesses. Highly supportive supervisors more frequently answered that their strengths are their 'interpersonal skills' and their 'personalities'. Supervisors who are seen as supportive by subordinates recognize that they are able to be friendly, approachable, and warm in the workplace. These characteristics may enable them to more easily provide the psychosocial and job-related support that subordinates need to be more successful. Further, by being warm and sociable, these supervisors may be more likely to develop relationships with peers and upper-level management, increasing their chances of promotions and organizational support. These positive characteristics may promote learning through interaction, contributing to the development of supportive supervision skills (Schooler, 1984). Another statistically significant difference was that the less supportive supervisors were more likely to list being 'unsociable' as a weakness of theirs. Supervisors who have been rated as less supportive seem to recognize that they need to be friendlier in the workplace to gain followership amongst subordinates.

Consistent with the ecology model, personality-related competencies like the ones reported above may be factors that affect a supervisors' ability to be more or less supportive in the workplace. According to the findings of this study, competencies that are most critical for a supervisor to be supportive of subordinates are humility, sociability, personal warmth, and interpersonal behaviour (see Figure 1). Organizations should develop validated selection systems that enable hiring supervisors and/or human resource professionals to select supervisors into the organization who are inclined to behave in a supportive manner towards subordinates. Structured interviews (Macan, 2009) and behaviourally focused résumé screening (Weinstein, 2012) can assist organizations to



**Figure 1.** Antecedents to supportive supervision.

validly predict the future supportive behaviours of supervisors based on assessments of the applicants' previous behaviours and experiences.

### ***Skills and abilities of supportive supervisors***

The ecology model describes causally recursive sequences of work and life events as a learning process (Mumford, Stokes, & Owens, 1990). On the basis of this notion, we examined how the work experiences and workplace perceptions differed between supervisors seen as more or less supportive by subordinates. In doing so, we learned that there are some important skills and abilities that distinguish more supportive supervisors from less supportive ones. For instance, less supportive supervisors (and not highly supportive ones) commonly believed that their subordinates would criticize them for their communication skills. We also examined responses related to what supervisors believe they have learned about themselves from their current jobs. The highly supportive supervisors most commonly said that they learned about their own organizational preferences such as enjoying working in an office versus a field setting. It seems that they may have a clear understanding of the work structures in which they prefer to work. The less supportive supervisors, on the other hand, were more likely to recognize areas for growth and development, such as needing to listen more and to improve their communication skills, in addition to needing to be more trusting.

Recent literature on organizational trust shows that it is an important component of managerial citizenship behaviours (Mayer, Davis, & Schoorman, 1995). The identification of aspects of trustworthiness may be an important step towards developing supervisors who are seen as supportive by subordinates. Offerman and Hellman (1996) showed that when managers exhibited strong communication skills, like delegation and inviting the participation of their subordinates, the level of stress and burnout amongst the employees was reduced. Organizations can use this information to develop managerial training programmes that assist supervisors in developing their communication and trustworthiness skills and abilities.

On the basis of content analysis of responses to items related to supervisors' workplace relationships and experiences, we learned that highly supportive supervisors may be more likely to listen and communicate effectively with subordinates. Less supportive supervisors, however, are more likely to report they need to improve upon their listening skills and their ability to trust subordinates. These findings support the idea that antecedents to supportive supervision may include communication skills and trustworthiness (see Figure 1). Organizations may want to implement peer mentoring (between more and less supportive supervisors) to enhance supportive behaviours in the workplace. Training and development programmes with an emphasis on building supervisors' supervisor-subordinate communication skills (e.g., listening, feedback giving and seeking, conflict supervision) and on enhancing supervisors' own self-awareness could be implemented. Further, organizations could implement team-building activities and exercises for supervisors and their subordinates to help them build rapport, trust, and social support.

### ***Social identity and social support***

We also learned about supervisors' life experiences including the leisure activities and social groups in which they participate. These activities and groups may provide sources of social identity and support, which increase supervisors' ability to be more supportive in

the workplace (Mumford, Stokes, & Owens, 1990). It seems that highly supportive supervisors are more likely to be involved in non-competitive exercise activities like yoga, walking or running, and self-improvement activities like reading, playing music, or learning a new language. Less supportive supervisors were more likely to be involved in competitive or team-based activities like hockey, football, and golf. Given that the supervisors' responses to other items indicated less supportive supervisors struggle with burnout and being overly stressed, perhaps highly supportive supervisors are able to achieve a better work-life balance and overall sense of well-being through their non-competitive and self-improvement focused activities (Lovelace, Manz, & Alves, 2007). Less supportive supervisors may find well-being more difficult to achieve considering they are involved in more competitive and achievement-oriented activities that may provide less relaxation than more individual kinds of activities.

Furthermore, supervisors who engage in competitive sports by nature may be highly achievement oriented. While being achievement oriented and motivated are often seen as positive characteristics of supervisors, too much competitive drive could be a bad thing (Sorrentino & Field, 1986). Thus, it seems that supervisors who are perceived to be overly achievement oriented might be seen as less supportive and less desirable supervisors and might fail to fully gain support and cooperation from their employees.

We also examined the clubs and social groups that these supervisors are involved in and found that there were no statistically significant differences between the groups. However, the highly supportive supervisors were more likely to be involved in every type of social group – professional, religious, exercise-related, community, and governmental/militaristic groups – than the less supportive supervisors. From a social identity perspective, every experience that possibly categorizes an individual has the potential to shape subsequent behaviours (Ashforth & Mael, 1989). It is possible that by being involved in more community-oriented social groups and activities, supervisors are able to better identify with the skills and traits needed to be seen as a supportive group member.

On the basis of content analysis of responses to items related to supervisors' activities and social groups, we found that highly supportive supervisors are more involved in community and professional groups, non-competitive athletic activities, and self-improvement leisure activities. Thus, it seems that antecedents to supportive supervision may include social support and the supervisors' ability to identify with community social groups and activities (see Figure 1). Supervisors may gain social support from these types of activities that may serve to enhance their supportiveness at work. Organizations may want to promote community involvement amongst supervisors, so that supervisors can obtain diverse social experiences and practice people skills. Research has shown that those involved as volunteers in 4-H, a youth development organization, reported improving their networking and social skills, their citizenship abilities, as well as their ability to teach others (Fox, Schroeder, & Lodl, 2003). Also, by being involved in activities like exercise and other self-improvement activities, supervisors may be able to better maintain a sense of well-being, which should positively impact their relationships at work.

### ***Limitations and future research***

The intercorrelations (Table 1) showed that the sex of the leader (being a woman) and leader supportiveness were positively and significantly related. Perhaps, expected gender roles and stereotypes make it more likely for female supervisors to receive higher ratings of supportiveness than for male supervisors (Ridgeway, 2007). Future research may want to expand upon this line of research to understand whether women are truly more likely

to exhibit more supportive behaviours than men or whether the behaviours women exhibit are considered to be more supportive because of gender role stereotypes. If stereotypes are unfairly portraying men to be less supportive than women, training may be needed to break down barriers impeding men's abilities to appear supportive. Also, the intercorrelations (Table 1) of this study showed that as the organizational level of the leader increased, the relationship to leader supportiveness weakened and became non-significant. Research has supported the idea that different hierarchical levels require different types of behaviours, such that the higher the level of leadership, the more masculine and agentic are the expected behaviours for the leader (Eagly & Karau, 2002). Thus, future research should explore how and why the hierarchical level of supervisors may impact the perceived supportiveness of supervisors, as well as whether supportiveness is differentially related to effectiveness based on the level of leadership.

In addition, while we took steps to select items for our measure of PSS that closely reflect items commonly used to measure PSS, we cannot be sure of the construct validity. It is possible that the biographical data we found to differentiate highly supportive supervisors from those who are less supportive may also differentiate supervisors who differ in consideration and relations-oriented behaviours as well as other leadership styles and behaviours (e.g., initiating structure). The domain of supportive supervision has been discussed and incorporated into many different models and theories of leadership. Future research clarifying the content domain of supportive supervision itself would be useful. Further, the content analysis used in this study revealed that supportive supervisors may have personality-related competencies, skills and abilities, and group memberships that may affect their abilities to be friendly and supportive in the workplace. Although proposing that the direction of the relationship is one where personality-related characteristics and life experiences precede supportive behaviour is theoretically sound, the design precludes firm causality inferences. It is possible that there are reciprocal relationships present such that being supportive at work encourages one to have certain personality characteristics and interests in being involved in a variety of activities and groups outside of work, which then strengthens the supervisor's ability to be supportive in the workplace.

It is also important to note that our measure of personal characteristics included self-reported qualitative responses only. Future research may want to include a quantitative personality inventory to clarify and validate the personality characteristics that may be associated with supportive supervision. Finally, this study did not examine any of the contextual (e.g., organizational or environmental) factors that may impact supervisors' ability or the organization's desire for supervisors to be supportive in the workplace. In particular, our analysis did not take into account the industry in which they operate. It is possible that supportive leadership may be considered more of a norm depending on the organizational industry (e.g., health care, education) or even the functional area of supervisors (e.g., human resources). Future researchers may want to examine the potentially moderating effects of these characteristics on the supervisors' abilities to be supportive of others in the workplace.

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