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The Relationship Between Self-Monitoring and Organizational Training Effectiveness and Satisfaction

Joanna Wulbert

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THESIS APPROVAL

The abstract and thesis of Joanna Wulbert for the Master of Science in Psychology were presented on May 22nd, 1997 and accepted by the thesis committee and the department.

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ABSTRACT

An abstract of the thesis of Joanna Wulbert for the Master of Science in Psychology presented May 22, 1997.

Title: The Relationship between Self-Monitoring and Organizational Training Effectiveness and Satisfaction.

The present research explored the relationship between self-monitoring and training. It was hypothesized that high self-monitors' sensitivity to social cues would improve training satisfaction and learning. This study was divided into 2 parts; a field and a laboratory study. Nine trainees and 8 peer trainers participated in the field study and 75 undergraduate psychology students participated in the laboratory study. Due to the extremely small sample size of the field study, the results were not conclusive. In the laboratory study, trainers' that were categorized as high self-monitors were associated with higher satisfaction levels among trainees. However, self-monitoring was not related to trainee learning. Implications for self-monitoring and training are discussed.

THE RELATIONSHIP BETWEEN SELF-MONITORING
AND ORGANIZATIONAL TRAINING EFFECTIVENESS
AND SATISFACTION

by

JOANNA WULBERT

A thesis submitted in partial fulfillment of the
requirements for the degree of

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in
PSYCHOLOGY

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1997

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Introduction

The demographics of the workforce are changing. Minorities, women, and older workers are employed by organizations in growing numbers (Goldstein,1993). Furthermore, a growing percentage of people entering the workforce possess inadequate basic skills (Cascio & Zammuto, 1987). Goldstein (1993) summarizes this situation when stating, “[m]anagers will need to provide on-the-job training to integrate unskilled youth into the work force, while working with job incumbents and other managers who may not have previously been a traditional part of the work force” (p.15).

Not only are the demographics of the labor pool changing but also the skills necessary to successfully perform the job. Current business trends are creating an increasing demand for high technology and service-oriented positions (Goldstein,1993). However, the discrepancy between the skill level of applicants and the skill level required for new positions appears to be growing larger. In order for companies to remain functional and competitive, they are going to have to bridge this “gap” between labors’ skills and job requirements. One way to do this is by training the workforce.

The factors affecting training satisfaction and effectiveness are becoming more completely understood. The implications of particular instructional designs, trainee motivation, and information processing have been explored (Goldstein,1993). However, the characteristics of the skills an instructor of a training program should possess remain only theoretical hypotheses. Therefore, it is the purpose of this study to investigate the characteristics that enhance trainer effectiveness.

Training

Gordon, Zemke, and Jones (1988) states that trainers should be well-organized, encourage students to use their talents to achieve, and treat course participants as adults. Knowles (1987) amplifies this suggestion by making it a responsibility of organizations. The organization has to adjust training programs to meet the motivational and learning needs of adult learners. However, accommodating these needs presents a challenge. Since most people's experience with training comes from their own primary and secondary school education, these experiences are used as references in developing training programs. Unfortunately, applying these pedagogical systems, which were established for teaching children and young adults to adult learners, will not have the same effect as it did on impressionable

youth (Knowles,1987). For example, adults have a need to be self-directing and possess a greater volume and different quality of experience than youth (Knowles,1987).

Essentially, adult learners have a unique perspective and have differing historical and educational experiences that they bring to every training situation. Therefore, a trainer should be flexible and adaptive to incorporate these varying needs to motivate the adult learner and create a positive learning environment (Wlodkowski,1986). Hudson (1991) suggests that trainers should have an expertise in adult developmental psychology and human systems management, be able to give productive feedback, have an awareness of their own beliefs, and be able to process and respond to individual differences. In summary, these theories imply that trainers not only must be informationally competent but also be able to be adapt their skills to the adult learners' needs.

Self-Monitoring

In 1974, Snyder identified a construct distinguishing individuals on their ability to be flexible or modify their behavior based on social situations. He called this dyadic personality trait self-monitoring. People are either high self-monitors or low self-monitors. "High self-monitors use situational cues to guide their behavior" (Anderson &

McLenigan, 1987; p. 149). They display more behavioral flexibility. In contrast, low self-monitors use their own attitudes and beliefs to guide their behavior. They are less aware of interpersonal cues and are less concerned with situational norms and socially appropriate behavior. A low self-monitor's behavior is highly consistent across situations (Snyder, 1979).

Snyder's (1974) original study of the self-monitoring construct consisted of four parts. The areas of exploration concentrated on the following dimensions of self-monitoring: control of self-presentation, expressive behavior, ability to express different emotions, and attention to social comparison information. To assess control over self-presentation and expressive behavior, Snyder (1974) had 16 members of a male fraternity complete the 25-item self-monitoring scale and then judge others' ability to present the appropriate "self." He found that high self-monitors were rated by others as displaying characteristics that coincided with self-monitoring significantly more than low self-monitors.

In a second study, Snyder administered the self-monitoring scale was administered to actors and hospitalized psychiatric patients. The purpose was to show the scale's discriminate validity in distinguishing between high and low

self-monitors' ability to modify expressed emotion and behavior. Snyder's assumption was that actors should rank high on the ability to modify their emotions and behaviors to match the situation and that patients with mental disorders should lack this ability. He found that psychiatric patients were significantly lower than the actors on self-monitoring. In a third study with 30 high and 23 low self-monitoring college students, differences in ability to express different, arbitrary emotions were tested. Snyder (1974) found that high self-monitors were able to display the required emotions more accurately than low self-monitors. Lastly, in the fourth study, Snyder(1974) found that high self-monitors focused greater attention on social cues. The participants of this study were given a sheet of paper and told that the sheet contained the response most frequently answered by a majority of people. High self-monitors more frequently referred to the majority sheet than low self-monitors.

Personality Traits and Leadership

A variety of traits are frequently associated with leadership such as dominance, intelligence, and masculinity, but the evidence has been weak that these characteristics are strongly and consistently related to leadership (Ellis, 1988; Lord, DeVader & Alliger,1986). Reviews by Jenkins

(1947), Stogdill (1948), and Mann (1959) state that there is little support for the position that leaders possess unique characteristics that distinguish them from non-leaders (as cited in Ellis, 1988). Due to these negative findings, the study of trait-based variance in leadership was virtually abandoned in the 1950's (Ellis and Cronshaw, 1992).

Two recent reviews have established that leadership may be understood in terms of personality. Lord, DeVader and Alliger's (1986) meta-analysis of the earlier reviews mentioned previously found that they were far too pessimistic and that some variance in leader emergence can be predicted by the dominance, intelligence, and masculinity/femininity of the leader.

Furthermore, Kenny and Zaccaro (1983) found methodological and statistical deficiencies in the research that led to the rejection of the association between personality and leader emergence. They suggested that prior research has not identified predominant personality traits that are consistently related to leadership. They speculated that individuals who emerge as leaders may be able to perceive the needs of the group and pattern their own behavior accordingly. Meta-analytic studies encouraged researchers to explore the trait of self-monitoring and leader emergence. However, since self-monitoring was not

specifically reviewed in these meta-analytic studies, recent studies of leadership which have included self-monitoring will be reviewed next.

Self-Monitoring and Leader Emergence

Leader emergence research attempts to clarify whether self-monitoring improves the understanding of who emerges as the leader of a small group. Typically, this is measured by a member selecting the one person they would choose as the leader for the next meeting, ranking other members by preference for leadership roles, or by completing a Likert-type scale measuring the overall ability of the other group members (Anderson & Wanberg, 1991). Garland and Beard (1979) were the first to look at the effects of type of task and self-monitoring on leader emergence (Anderson, 1990). They hypothesized that when the task facilitated discussion and the goals were unclear high self-monitors would emerge more often as the leader because of their ability to clarify the expectations of the group and modify their self-presentation to match these expectations. They also hypothesized that when the goals were clearly explained the person with best task performance, not self-monitoring, would emerge as the group's leader. However, Garland and Beard's (1979) hypotheses were true only for all female groups. They suggested this result may have resulted because many of the

male participants scored close to the median. Furthermore, they suggested that females may be more sensitive to interpersonal cues.

Garland and Beard's (1979) study was unchallenged for many years until the research analyzed the effects of mixed-sex groups on leader emergence. Ellis, Adamson, Desza, and Cawsy (1988) found that male high self-monitors emerged as the leader when the groups were mixed-sex and had to perform tasks over a substantial period of time. Dobbins, Long, Dedrick, and Clemons (1990) found that high self-monitors more than low self-monitors and men more than women emerge as leaders of mixed-sex groups. These results are consistent with the work in social cognition and stereotyping (Dobbins, Cardy, & Truxillo, 1988) and the previous research done on leader emergence. However, an important difference between the Dobbins et al.'s (1990) study and other studies was their use of hierarchical regression. They found that gender and self-monitoring each contributed separately to leader emergence.

Researchers have also explored how individual perspectives toward leadership affect emergence. Kent and Moss (1990) found that high self-monitors are more likely to report leader emergent behaviors than low self-monitors. In this study, they closely analyzed the responses of the group

members. Interestingly, they discovered that the group members viewed the high self-monitors as influencing group goals and decisions but not as assuming the leadership role or as leading the conversation.

Cronshaw and Ellis (1991) found that high self-monitors emerge as leaders more often than low self-monitors because they are sensitive to and act on social cues regardless of attitudes toward leadership. However, low self-monitors with positive attitudes toward leadership emerged more often than low self-monitors with unfavorable attitudes toward leadership. The results of this study support the two major propositions of Snyder's (1974) self-monitoring theory: high self-monitors observe and react to the social situation whereas low self-monitors rely more on their own opinions and attitudes.

Ellis and Cronshaw (1992) extended previous work in this area by focusing on sex of the group members and the nature of the task as proposed moderators. Three-hundred and eighty-eight third year college students in their natural work groups completed tasks where the group progress was either ambiguous or known through extensive feedback. Their results support the findings of the previous studies in that males who were high self-monitors emerged more often as leaders in mixed-sex groups and self-monitoring was not

significantly different for females or males. However, they did not find support for their second hypothesis that the amount of feedback would moderate the relationship between self-monitoring and leader emergence. They concluded that this indicated that both low and high self-monitors are sensitive to social demands but that high self-monitors may emerge as the leader because of the ability to modify their behavior to these demands.

Self-Monitoring and Leader Effectiveness

The second area of self-monitoring studies explores the effects of self-monitoring on leader effectiveness. Unlike the extensive work in the area of leader emergence, few studies exist that address the relationship between self-monitoring and leader effectiveness. Since task-oriented behaviors have been more closely associated with male leadership, Anderson and McLenigan(1987) hypothesized that self-monitoring would correlate with task-oriented behavior for women leaders. Secondly, they hypothesized the opposite relationship for male leadership and task-oriented behavior. Lastly, "[s]ince self-monitoring was predicted to enhance task behavior more for female leaders than for male leaders, the logical subsequent prediction was that self-monitoring would be more highly correlated with leadership

effectiveness for females than for male leaders" (Anderson & McLenigan, 1987; p. 152).

Anderson and McLenigan's study consisted of forty, four person, same-sex groups who completed the Moon Tent Task. "This task required subjects to fold paper in a certain number of steps until an object resembling a tent was completed" (Zaccaro, Foti, and Kenny, 1991; p. 310). The subjects worked in groups and were told that their group was in competition with other groups. These measures were taken to simulate a production line atmosphere. Each subject completed three surveys: the 25-item Self-Monitoring Scale (Snyder, 1974), a leader rating scale for other members, and a ranking scale for themselves and others. Self-Monitoring was minimally correlated with task effectiveness for female leaders ($\underline{r} = .34$, $\underline{p} = .07$). Anderson also explored the 3 subscales of the original self-monitoring scale identified by Briggs, Cheek, and Buss (1980); Acting, Other-Directedness, and Extroversion. Only one subscale, Acting, reached significance for females leadership as having the best ideas ($\underline{r} = .36$, $\underline{p} = .05$) and participation rates ($\underline{r} = .39$, $\underline{p} = .04$). However, the self-monitoring scale was not correlated to any male leader behaviors.

Anderson and McLenigan conducted a second study to address the limitations of prior lab research such as the

artificial environment, restricted range of participants, and limited generalizability. Forty female and 84 male middle-level managers in nine organizations in New Zealand completed the 25-item Self-Monitoring Scale, the Leadership Behavior Scale, and the Least Preferred Co-worker scale. The effectiveness of each manager was evaluated by a performance rating provided by the organization as well as a self-report. They found that only the extroversion subscale of the Self-Monitoring Scale correlated with self-rated effectiveness for men ($r = .28, p = .006$). Self-monitoring did not correlate with organizational effectiveness for male or female leaders. The authors noted that the non-significant results may be a product of the organizational reports of managerial effectiveness lacking objectivity and consistency and also because of the poor reliability for the Self-Monitoring Scale.

Anderson (1987) continued to explore the relationship between self-monitoring and leader effectiveness. Based on previous studies that found self-monitoring enhances job performance of women in traditionally male occupations, Anderson (1987) wanted to elucidate the effects of self-monitoring and males' effectiveness in traditionally female occupations. In order to explore this hypothesis, Anderson surveyed female and male nurses. Two-hundred twenty nurses

returned a survey consisting of demographic questions, a revised version of the self-monitoring scale developed by Lennox and Wolfe (1984), and a request for the employee to reported his or her performance rating as last rated by the hospital as well as what rating they would give themselves. Only 6% of the respondents were male ($n = 14$). There were no significant differences between male and female nurses for self-reported performance ratings or for the Self-Monitoring Scale. Only one factor, Sensitivity to the Expressive Behavior of Others, of the Self-Monitoring Scale, was significantly correlated with male nurses' organizational performance rating and self-evaluated performance. Anderson also surveyed females in nursing administration and found the same self-monitoring factor, Sensitivity to the Expressive Behavior of Others, to be correlated with job success. Anderson (1987) concluded that the differential affect of self monitoring on job success was "...probably because the social skills associated with high self-monitoring can enhance perceptions of occupation legitimacy" (p.85).

Lastly, Zaccaro, Foti and Kenny (1991) specifically examined the relationship between self-monitoring and leader emergence and effectiveness across multiple tasks. Twelve groups consisting of nine same-sex members rotated through

four tasks requiring different leadership styles. The styles relating to each task were initiating structure, consideration, persuasion, and production emphasis. The groups were further divided into smaller groups of three to perform tasks so that no member would perform a task with the same member twice. Subjects were then asked to rank and rate themselves and the other two members, and to complete the 25-item Self-Monitoring Scale. They proposed that if high self-monitors emerged as the leader and effectively displayed the "correct" leadership style for each of the four tasks, they would be demonstrating consistent behavioral flexibility.

Results revealed that only two of the four tasks had significant correlations between leader behavior and leader rating with self-monitoring. Self-monitoring was significantly correlated with average leader ranking with task relevant behavior on initiating structure and consideration tasks. Also, they found that sex did not have a moderating affect on the relationship. Overall, they found that 59% of the variance in emergence was trait based. Therefore, these results tentatively support the hypothesis that high self-monitors are more effective in displaying relevant or required behaviors for at least two of the four tasks studied.

Self-Monitoring and Subordinate Satisfaction and Training

Only one published study was found which researched the effects of self-monitoring on employee satisfaction. In a study of Mexican managers and their subordinates, Ayman and Chemers (1991) found that self-monitoring moderated the effect of the leader match between leadership style and the situation on employee work satisfaction. Seventy managers and seventy subordinates completed the 25-item Self-Monitoring Scale. The subordinates completed subscales of the Job Description Index (JDI) relating to satisfaction. Managers completed the Least Preferred Co-worker (LPC) and a measure to assess how much control they perceived they had over the situation. Based on Fielder's model (as cited in Ayman & Chemers, 1991), low LPC scoring leaders (i.e. leaders who are task oriented) in situations of high and low control were considered matched. High LPC leaders (i.e. leaders who are relationship oriented) were considered matched in situations of moderate control. Three two-way ANOVAS (match = in-match vs. out-of-match; self-monitoring = high vs. low) were conducted with the dependent variable of subordinates' satisfaction as measured by the JDI.

Ayman and Chemers (1991) discovered that leaders that were out-of-match with the contingency model but were high self-monitors had more satisfied employees than low self-

monitors ($F(1,64) = 3.97, p < .05$). High self-monitors in matched situations had poorer performance than in the mismatched situations, $M = 37.00$ and $M = 40.47$, respectively. Unfortunately, no statistical tests were documented in the article to show the magnitude of this difference. The researchers speculated that high self-monitors that are in-match appear uncertain and indecisive resulting in a less positive atmosphere in the work setting. Overall, they claimed that their research supported self-monitoring as a measure of social intelligence, adding to the understanding of self-monitoring in that their research looks at its effects on employee satisfaction.

Only one article in the published literature addresses training and self-monitoring. Based on Snyder's theory (1974), Anderson (1990) suggested that high self-monitors should benefit most from leadership training that instructed leaders to change their own behavior based as a function of group needs. In contrast, low self-monitors should be taught skills to change the situation to match their intrinsic behavioral style. However, there has been no empirical research to date that has assessed Anderson's predictions.

Summary of Self-Monitoring Literature

The literature in this area shows mixed results. Characteristics of the group, sex of the leader, attitudes

toward leadership, leader effectiveness, and employee satisfaction appear to have some relationship with self-monitoring. Overall, in dynamic situations, individuals who are able to identify the needs of the group and respond appropriately consistently emerge as leaders and are more effective in these roles. In static or traditional situations, low self-monitors perform as well as, if not better, than high self-monitors. Research in this area should identify in greater detail how self-monitoring enhances leader effectiveness and employee satisfaction.

An assumption of the current study was that self-monitoring should relate to all roles that require leadership skills, not just managerial positions or group tasks. For example, trainers facilitate group learning, provide feedback and reinforcement, and give direction in dynamic environments. Since the role of trainer requires leadership skills, it is reasonable to assume that self-monitoring may have a relationship with training. However, no research to date has examined this relationship. The purpose of the current study was to explore the relationship between self-monitoring and organizational training effectiveness and satisfaction.

Based on the previous literature and the work of Aronson, Brewer, Carlsmith (1985), this study was divided

into two parts, a field study and a laboratory experiment, to ameliorate the limitations and weakness of each method. Since a predominant type of training in organizations is on-the-job training (Goldstein,1993), the laboratory will be constructed to simulate an on-the-job training instructional program.

The first study was performed in a local computer company. The company desired to know if behavioral flexibility affected training satisfaction. The researcher constructed the following hypothesizes based on adult learning literature to address this question:

Hypothesis I

Overall, high self-monitoring trainers will be associated with higher satisfaction levels among their trainees.

Hypothesis II

Trainers of high self-monitoring trainees will be more satisfied with the training experience.

In the second study, the researcher attempted to expand on work from the applied setting by incorporating environmental and group controls. Furthermore, the researcher wanted to validate the effects of leaders self-monitoring on subordinate satisfaction found by Ayman and Chemers (1991) in a training environment. In the second study, the researcher reassessed the first hypothesis. In addition, a third hypothesis was created to assess the relationship between self-monitoring and learning. Again, the third hypothesis is based on the adult learning literature. The following hypothesizes were measured in Study 2:

Hypothesis I(reiterated)

High self-monitoring trainers will be associated with higher satisfaction levels among their trainees.

Hypothesis III

Overall, trainees of high self-monitoring trainers will show greater learning as measured by their individual learning retention scores.

Study 1

Method

Measures of Self-Monitoring

As is obvious in previous studies, there appears to be some inconsistency in how the self-monitoring construct is measured. Snyder's (1974) original scale contains 25 true-false items. The test was created to assess five proposed elements of self-monitoring: (1) concern with social appropriateness, (2) attention to social comparison information, (3) the ability to control and modify self-presentation, (4) the use of this ability in particular situations, and (5) cross-situational variability of behavior. A median split procedure is typically performed using all participants' scores. Those scoring above the median are considered high self-monitors and those below the median are considered low self-monitors. Subscales of Acting, Other-Directedness, Extroversion have been identified through factor analysis by Briggs, Cheek, and Buss (1980). The combined scale has a Kuder-Richardson reliability of .70 and a test-re-test reliability of .83 (Snyder, 1974).

Due to concerns about possible psychometric weaknesses of the scale, particularly the original scale's ability to tap interpretable and meaningful variables, Lennox and Wolfe

(1984) created a similar, but more reliable 13-item true - false scale. Again through a factor analysis, Briggs et al. (1980) uncovered 3 factors; (1) expressive self-control, (2) social stage presence, and (3) other-directed self-presentation. A third scale was devised by Snyder and Gangestad (1986) from their original 25 item true-false scale. Items that did not correlate at least +.15 with a latent self-monitoring causal variable were dropped. The resulting 18-item measure has an internal consistency of .70, which is higher than that of the original 25-item scale. This scale is also considered to be more factorally pure than the other scales (Snyder & Gangestad, 1986). This scale was chosen to measure self-monitoring in the present studies. Furthermore, since no literature to date has analyzed self-monitoring as a continuous variable, Snyder's self-monitoring construct will be analyzed as a dichotomous variable using the median split procedure discussed previously (Table 1).

Participants

Thirty-eight employees completed the Self-monitoring Scale (37 males and 1 female). Nine of the employees were peer-trainers and 29 were trainees. The usable number of cases equaled 8 pairs. One trainer had two different

trainees. All participants volunteered to complete the survey as part of a corporate training outcomes questionnaire.

Measures

Self-Monitoring Scale

(Snyder & Gangestad, 1986). Subjects responded to each statement by answering true or false to whether the statement generally described their behavior. The participants' self-monitoring score was determined by scoring those responses corresponding with high self-monitoring as one point. A median split procedure was performed using a median of 8. The participants' scores ranged from 3 to 15. Participants scoring from 0 to 8 were considered low self-monitors ($n = 20$, 53%) and those scoring from 9 to 18 were considered high self-monitors ($n = 18$, 47%). In the present study, the self-monitoring scale had an internal reliability of $\alpha = .69$ (Table 1).

Trainee Satisfaction

Based on Taylor and Bowers measure of Supervisory and Peer Leadership (as cited in Cook, Hepworth, Wall, & Warr, 1981, chap 9), four items were chosen by the participating company's training managers as a measure of satisfaction with training. The questions were answered by the trainers

and trainees on a 5 point Likert scale ranging from very little to very great extent. The satisfaction scale had a strong internal reliability of $\alpha = .81$ (Table 2).

Results of Study I

The means and standard deviations of Study 1 variables are presented in Table 3. The frequency of missing values by number of items left blank were: 1 (n = 1), 2 (n = 2), 3 (n = 1), and 11 (n = 1). A mean replacement was done for missing items to obtain the participants' total self-monitoring score.

Hypothesis I:

Overall, high self-monitoring trainers will be associated with higher satisfaction levels among their trainees. A one-way ANOVA was conducted with one independent variable, trainer's self-monitoring, and with the dependent variable being trainee satisfaction ($F(1,7) = .35, p = .57$).

Hypothesis II:

Trainers with high self-monitoring trainees will be more satisfied with the training experience. A one-way ANOVA was conducted with one independent variable, trainee's self-monitoring, and with the dependent variable being trainer satisfaction ($F(1,8) = 1.23, p = .31$).

The ANOVA results do not support either Hypothesis I or II. No significant differences were found between trainer

self-monitoring and trainee satisfaction or between trainee self-monitoring and trainer satisfaction.

Study II

Method

Participants

Seventy-five college students in general psychology classes participated in this study (50 females and 25 males).

Measures

Self-Monitoring Scale

(Snyder & Gangestad, 1986). Subjects completed the scale as in the first study by answering true or false as to whether the statement generally described their behavior (Table 1). Again, a median split procedure was performed using a median of 8. The participants' scores ranged from 4 to 18. Participants scoring from 0 to 8 were considered low self-monitors ($n = 38, 51\%$) and those scoring from 9 to 18 were considered high self-monitors ($n = 37, 49\%$). The scale had an alpha of .71.

Trainee Satisfaction

The four items from the first study as well as four items recommended by Kirkpatrick (1996) were completed only by the trainees (Table 2). The scale had an alpha of .85.

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Study II

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Trainee Satisfaction

The four items from the first study as well as four items recommended by Kirkpatrick (1996) were completed only by the trainees (Table 2). The scale had an alpha of .85.

Overt Task Performance/Learning

The subjects participating as trainees demonstrated their learning by completing a test at the end of the session. The test had 22 parts which each constituted one point of the possible 22 points on the test.

Learning Task

The students were asked to find the means and standard deviations for several variables by using statistical commands on the computer program, Excel. The student were also taught to sort the data by a particular variable. The training task and test had identical questions but with different data sets. The data sets were based on fictitious information.

Procedure

At the beginning of the participating psychology classes, the researcher briefly explained the study and requested that those students interested in participating sign a consent form and complete an additional survey. The survey consisted of the 18-item Self-Monitoring Scale (Snyder & Gangestad, 1986) plus two additional questions; one asking if the student was fluent in spoken English and the second asking about their experience with the software package, Excel. As the students completed the survey, they

were given the opportunity to sign-up for training sessions based on gender (i.e., all male and all female sessions). Due to the previous report of inconsistent effects of mixed or same-sex groups on self-monitoring, this procedure was incorporated to isolate the effects of self-monitoring on leader effectiveness and trainee satisfaction. The maximum capacity for each training session was twenty. Eleven training sessions were held.

Prior to the study, the Self-Monitoring Scales were scored. Once the participants arrived, their surveys were separated into either high or low self-monitoring groups. Since the research chose to split the group prior to the session to ensure equal numbers of low and high self-monitoring trainers, a median of 10 was used to separate low and high self-monitors based on the work of Snyder and Gangestad (1986). Participants scoring from 0 to 9 were considered low self-monitors and from 10 to 18 high self-monitors. If the participant marked they were not fluent in spoken English, their surveys were removed from groups. This precaution was adopted due to the heavy emphasis on group speaking for the trainer role. The researcher felt it would add unfair stress on those who were not fluent in English to be chosen as trainers. Based on the procedure just described, one member of either the high or low self-

monitoring group was randomly selected to be the sessions trainer. The sessions were designated as either high self-monitoring ($n = 5$) or low self-monitoring groups ($n = 6$) before the sessions began.

The randomly chosen participant or "trainer" was asked to follow the researcher to a nearby room in order to learn the task, an Excel computer spreadsheet exercise. The researcher explained that they would be showing the rest of the group. The trainer then received a \$3.00 gift certificate for being chosen. The researcher explained that the trainer had as much time as necessary to learn the task and that the trainer could explain the task to the other group members in any manner that the trainer felt would be most effective. During the time that the researcher was teaching the trainer, the other group members or "trainees" watched a forty-five minute film on work-family issues and sexual harassment.

The researcher instructed the trainer by reading aloud a list that described in detail how to complete each step of the spreadsheet task. The trainer completed each step on the computer as the researcher read through the list. This procedure list was given to the trainer to use as a guide during the training of the other group members. Once the trainer felt comfortable with showing the rest of the group

members the task, the trainer and researcher returned to the group where the researcher introduced the trainer. Then, the trainer instructed the group. The range of time the trainers spent teaching was from 17 minutes to 49 minutes. Once the trainer was finished, the researcher had everyone (except the trainer) complete the test.

Results of Study II

Initially, 145 students signed up for the study for a total of 13 sessions. The study had a 54% participation rate leaving only 75 students actually completing the study during the total of 11 sessions. The small sample size of 64 trainees and 11 trainers adversely affected the power of some of the between subject comparisons. The session sizes are presented in Table 4 arranged by trainers self-monitoring. The frequency of missing values ranged from 1 to 3 ($\underline{n} = 7$). The self-monitoring scale had an internal reliability consistent with the previous research ($\alpha = .73$). Furthermore, the satisfaction scale had a strong internal reliability ($\alpha = .83$).

A correlation matrix for self-monitoring, satisfaction, test score and Excel knowledge(see Table 5) revealed that only Excel knowledge of the trainee was significantly correlated with trainee satisfaction and trainee test score.

This made it appropriate to control for Excel knowledge in assessing the relationship between self-monitoring and learning and satisfaction.

Hypothesis I:

High self-monitoring trainers will be associated with higher satisfaction level among their trainees. An ANCOVA (Analysis of Covariance) was conducted with trainee satisfaction as the dependent variable and trainer self-monitoring as the independent variable with the covariate of previous Excel knowledge (Table 6). The results showed significant differences between low and high self-monitor trainers on trainee satisfaction when Excel knowledge is controlled for ($F(2,62) = 5.70, p = .005$). Trainer self-monitoring had a unique affect ($F(1,60) = 4.68, p = .035$) on trainee satisfaction as well as did Excel knowledge ($F(1,60) = 7.52, p = .008$). The total variance accounted for by the model was 16% ($R\text{-squared} = .16$). The means, standard deviations of trainer self-monitoring by trainee satisfaction and the power of the test are presented in Table 7. High self-monitor trainers were associated with significantly higher trainee satisfaction scores. Furthermore, the means for trainee satisfaction for the different levels of Excel knowledge, presented in Table 8,

reveal that more Excel knowledge was associated with greater satisfaction as reported by the trainees.

Hypothesis III:

Overall, trainees of high self-monitoring trainers will show greater learning as measured by individual learning retention scores. Again, an ANCOVA was conducted with the dependent variable, trainee test score, the independent variable, trainer self-monitoring, and a covariate of previous Excel knowledge (Table 8). This was done to assess differences of high and low self - monitor trainers on trainee learning after controlling for previous Excel knowledge. However, unlike the effect of self-monitoring on trainee satisfaction, the third hypothesis was not supported. There did not appear to be a significant difference between high and low self-monitor trainers on test performance after controlling for the affects of Excel knowledge. However, the results show significant differences in test scores based on the different levels of Excel knowledge, $F(1,60) = 6.41$, $p = .014$. The means, standard deviations of trainer self-monitoring scores by trainee satisfaction and the power of the test are presented in Table 7. The means for test scores on the different levels of Excel knowledge are presented in Table 9.

Exploratory Analysis

In order to assess the possible effects of gender, one-way ANOVAS were performed between gender and the following dependent variables: trainee satisfaction, trainee test score, Excel knowledge, and Self-monitoring. None of the results showed significant differences. The means and standard deviation of each dependent variable are presented in Table 10.

The researcher also performed hierarchical regressions for both Hypothesis I and Hypothesis III to determine if self-monitoring as a continuous variable provided any more information about the relationship between the variables. Self-monitoring was entered on the second step of the model after Excel knowledge. However, there was no increase in the variance accounted for by the independent variables.

The researcher also attempted to assess differences in overt behavior displayed by high and low self-monitor trainers to further understand the construct's effect on training. Due to the very small number of trainers ($n = 10$), the power of ANOVAs was low, ranging from .06 to .29. None of the comparisons were significantly different.

However, some trends did appear. Table 11 lists behaviors that accounted for more than 20% of the variance in self-monitoring ($R\text{-squared} > .20$) but did not reach

statistical significance. High Self-monitors used the words "I" and "We" more frequently, trained for a longer period of time, and had a higher frequency of positive feedback. Low self-monitors pointed to the screen more frequently and had a higher frequency of negative feedback. Although the reader is urged to remember that these behavioral differences are not statistically significant, possible implications of these trends as well as the others will be discussed.

Discussion

Study I

In the first study, the hypotheses were not supported, but this could have been a result of many factors: organizational culture, poor reliability of the Self-Monitoring Scale, or, most important, the small number of participants. It is the researcher's impression that a combination of these influences help to explain the results. Companies differ in the ways which employees communicate, interact, and reinforce behavior and may possess different overall values, systems, and philosophies (Schein,1992). An indicator of the influences of organizational culture was the high number of missing items. For example, items 2, 5, and 11 had very poor correlations with the rest of the scale; $\underline{r} = .03$, $\underline{r} = .02$ and $\underline{r} = .07$ respectively. These items asked; "[a]t parties and social gathering, I do not

attempt to do or say things that others will like," "I guess I put on a show to impress or entertain others," and "I would not change my opinions (or the ways I do things) in order to please someone or win their favor"(Snyder & Gangestad,1986, p. 137). The wording of the scale items may not coincide with such organizational values as self - confidence, strong character, or honesty that are associated with this company's culture. The wording of these items may have caused the employee to misinterpret, perhaps negatively, the underlying construct the items were attempting to measure.

The researcher's conclusions are also based on qualitative data received from employees. Some of the participants wrote that in some situations the questions would be true and in others they would not. Others commented that particular items were irrelevant and not applicable to their situation. Further concerns were expressed about confidentiality. These statements make the accuracy and honesty of response of other participants' answers questionable. Overall, the questionnaire does not appear to be an appropriate measure for this sample. In addition to construct misinterpretation, the wording of this scale may have negatively affected employee motivation to complete the survey or value its purpose and, therefore, decreasing

participation in the study. Future researchers doing work in organizational settings may need to create a measure of this construct that is more compatible with the particular organization's values and means of communication.

Furthermore, directions for the scale may need to provide more specific situational directions and greater assurance of confidentiality. The scale may need to be administered in a group setting were the researcher would be available to provide information and answer questions regarding the survey.

Study II

In the laboratory study, the results show support for the hypothesis that trainer self-monitoring improves trainee satisfaction but not for the hypothesis that trainer self-monitoring improves trainee learning. These mixed results were not anticipated but can be explained. Goldstein (1993) states that training research has found reaction measures and learning measures to be uncorrelated. In the present study, trainee satisfaction and learning were also uncorrelated ($r = .07$, see Table 5). It may be the case that self-monitoring affects trainee satisfaction but not learning.

As mentioned previously, Knowles (1987) stated that adult learners are different from younger learners in that

they have a need to be self - directing and possess unique experiences that they bring to the training environment. In the second study, the satisfaction survey consisted of questions such as, "...did you feel free to ask questions or express your opinions..." and "...was the trainer easy to approach and communicate with..."(Kirkpatrick, 1996, p.56). The high self-monitoring trainer's flexibility to adapt to social cues may have improved trainee satisfaction by creating a more open environment where the adult learner felt more self-directing and autonomous, which under certain circumstances should be related to learning.

The information gained from the behavioral observation provides possible explanations for the effect of self-monitoring on satisfaction. Developmental psychology literature shows as people age their ability for information processing decreases and therefore may create feelings of insecurity about the capability to perform (Baltes, 1987; Kail & Cavanaugh, 1996). The adult learners' increased satisfaction may have been a result of the high self-monitor trainer's use of more positive feedback about performance and spending a longer time teaching the task.

Future research would need to explore in more detail the behaviors exhibited by self-monitors that both increase and decrease trainee satisfaction. Once the behavioral

differences are identified, training programs could be created to incorporate this information. The present research did not assess whether the high self - monitoring trainer was reacting to social clues or relying on his or her own preferences. This aspect would also need to be explored. Researchers should explore which behavioral cues high self-monitors react to and how this affects their training styles. Another direction for continued study would be to explore whether the three factors (Other Directedness, Acting, and Extroversion) of the Self-monitoring Scale identified by Briggs, et al. (1980) differentially affects training satisfaction or training effectiveness. Unfortunately, the present study's sample size was too small to perform a factor analysis (Allen & Yen, 1979).

The researcher feels that it would premature to dismiss the possibility of a relationship between self-monitoring and learning. Future research may need to address this relationship from a different perspective. Trainees with more Excel knowledge performed better on the task regardless of trainer self-monitoring. Those with little or no experience performed worse than those with some or substantial experience (see Table 10). This finding is supported by the work of Ree, Carretta, and Teachout (1995). They found that prior job knowledge influenced future work

samples. Those individuals who performed better at the start of job training also performed better at the end of the training. They suggest that selecting applicants with higher scores on a pre-test of job knowledge should lead to better training performance. Even though this point may seem intuitively simple, it does have implications for this study. The current study did control for differing levels of Excel ability; however, future research may need to isolate prior knowledge levels of the groups in order to assess the effects of self-monitoring on learning. In addition, the task may need to be modified for each particular skill level.

The relationship between Excel knowledge and test scores may not only be a result of prior knowledge influencing subsequent performance, but prior Excel knowledge may also increase or be an indicator of the trainees' belief that they can achieve or accomplish the task. In other words, they may have a stronger sense of self-efficacy on this task. Bandura states that self-efficacy is "... defined as people's judgments of their capabilities to organize and execute courses of action required to attain designated type of performances. It is concerned not with the skills one has but with judgments of what one can do with whatever skills one possesses" (as cited

in Mathieu, Mathieu, & Tannenbaum, 1993). Mathieu, Mathieu, and Tannenbaum found that self-efficacy was affected by achievement motivation and initial performance. They also found self-efficacy assessed during the training session enhanced later training performance and reactions. However, self-efficacy did not moderate the relationship between training performance and training reactions. Future research could explore the relationship of self-monitoring to self-efficacy as a moderator of increased learning. Furthermore, Excel knowledge could be added to this model to assess its relationship to self-efficacy and, therefore, possibly to satisfaction and learning.

Limitations and Future Research

Although the limitations due to the study of particular populations were somewhat ameliorated by the use of combined research methods, there are still potential weaknesses in both studies. Organizational culture and the very small sample size may have obscured the results of the first study. In the second study, the use of only psychology students may limit the generalizability of this study to work environments and to this particular task. However, due to the prevalence of training systems, whether at work or at school, it is assumed that the research done here is an

attempt to uncover tendencies that affect all training systems both at work and school.

Another possible limitation to this study may be due to the simplistic analysis of the results. Due to the lack of any research in this area, the researcher chose very direct analysis techniques to uncover the first layer of this potentially complex situation. Future researchers may need to create a complex model including antecedents (like motivation and self-monitoring) moderators (like self-efficacy) and outcomes (such as reaction, learning, and behavior). Finally, as with all self-report measures, the ability of the participants in both studies to effectively assess their own behavior may make the results unstable (Coyne & Downey, 1991).

Future research needs to analyze the effects of self-monitoring in other organizations and in different situations. Experimentally, research should also explore the effects of mixed-sex groups and different tasks on trainer effectiveness and trainee satisfaction. Lastly, future research needs to uncover the other moderating variables of training success.

Overall, the study has raised some important issues regarding training satisfaction and effectiveness. This area of research is not only important to top level management

but it allows companies to improve the quality of the experience for learners. Since industrial corporations spend about 40 billion dollars a year on training, and since quality of training has been shown to reduce turnover, increase job satisfaction, and improve productivity (Goldstein,1993), understanding what moderates trainer effectiveness becomes not only beneficial but essential to the life of an organization and the employee.

Table 1

1. I find it hard to imitate the behavior of other people.	T	F
2. At parties and social gatherings, I do not attempt to do or say things that others will like.	T	F
3. I can only argue for ideas which I already believe.	T	F
4. I can make impromptu speeches even on topics about which I have almost no information.	T	F
5. I guess I put on a show to impress or entertain others.	T	F
6. I would probably make a good actor.	T	F
7. In a group of people I am rarely the center of attention.	T	F
8. In different situations and with different people, I often act like very different persons.	T	F
9. I am not particularly good at making other people like me.	T	F
10. I'm not always the person I appear to be.	T	F
11. I would not change my opinions (or the ways I do things) in order to please someone or win their favor.	T	F
12. I have considered being an entertainer.	T	F
13. I have never been good at games like charades or improvisational acting.	T	F
14. I have trouble changing my behavior to suit different people and different situations.	T	F
15. At a party I let others keep the jokes and stories going.	T	F
16. I feel a bit awkward in public and do not show up quite as well as I should.	T	F
17. I can look anyone in the eye and tell a lie with a straight face (if for the right end).	T	F
18. I may deceive people by being friendly when I really dislike them.	T	F

Table 2

1 = To a very little extent 2 = To a little extent 3 = To some extent 4 = To a great extent 5 = To a very great extent					
1. To what extent was the subject pertinent to your needs and interests?	1	2	3	4	5
2. To what extent did the leader state objectives?	1	2	3	4	5
3. To what extent did the leader keep the session alive and interesting?	1	2	3	4	5
4. To what extent did the leader maintain a friendly and helpful manner?	1	2	3	4	5
5. To what extent did the leader illustrate and clarify the points?	1	2	3	4	5
6. In general, how satisfied are you with your training experience?	1	2	3	4	5
7. To what extent was the trainer easy to approach and communicate with?	1	2	3	4	5
8. To what extent was the trainer clear and understandable in answering questions?	1	2	3	4	5
9. To what extent did you feel free to ask questions or express your opinions?	1	2	3	4	5

Table 3

Means and Standard Deviations for
Satisfaction in Study I

<u>Trainee Satisfaction</u>			
	<u>M</u>	<u>SD</u>	<u>n</u>
<u>Trainer</u> <u>Self-Monitor-</u> <u>ing</u>			
High	4.05	.21	5
Low	3.67	.76	3

<u>Trainer Satisfaction</u>			
	<u>M</u>	<u>SD</u>	<u>n</u>
<u>Trainee</u> <u>Self-Monitor-</u> <u>ing</u>			
High	4.00	.66	5
Low	4.25	.58	4

Note. The higher the value, the higher
the reported satisfaction.

Table 4

Size of Training groups for Study 2

<u>Session</u>	<u>Number of Trainees</u>
----------------	---------------------------

High Self -Monitoring Trainer

1.	3
2.	5
3.	7
4.	5
5.	9
6.	4

Totals:

6	33
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Low Self-monitoring Trainer

7.	3
8.	8
9.	6
10.	7
11.	7

Totals:

5	31
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Note. The mean and standard deviation for High Self Monitor Trainer group sizes are $\underline{M} = 5.83$ and $\underline{SD} = 1.83$ and the mean and standard deviation for Low Self Monitoring Trainer group sizes are $\underline{M} = 6.22$ and $\underline{SD} = 1.92$.

Table 5

Intercorrelations Between Self-monitoring, Test Scores,
Trainee Satisfaction and Excel Knowledge and Gender

Variables	1	2	3	4	5
1. Excel ^a	--	.32**	-.07	.31**	.10
2. Satisfaction ^b		--	.22	.07	.01
3. SM ^c			--	-.06	.01
4. Test Score ^d				--	-.09
5. Gender ^e					--

Note. ** $p < .01$, $n = 69$

^aExcel represents trainee knowledge of Excel. ^bSatisfaction represents trainee satisfaction. ^cSelf-monitoring represents trainer's self-monitoring. ^dTest Score represents trainees' test scores. ^eGender represents trainee gender.

Table 6

Analysis of Covariance for Trainee Satisfaction by Trainer
Self-Monitoring with Trainers Excel Knowledge

Source	df	SS	F	Sig of F
Within+ Residual	60	21.74		
Regression	1	2.72	7.52	.008
Trainer Self- Monitoring	1	1.70	4.68	.035
(Model)	2	4.13	5.70	.005
(Total)	62	25.87		

R-Squared = .16

Adjusted R-Squared = .13

Covariate	B	t-value	Sig of t
Excel knowledge	.18	2.74	.008

Table 7

Means and Standard Deviations for Trainee Satisfaction and
Test Scores of Study 2

	<u>Trainer Self-monitoring</u>	
	High	Low
Trainee Satisfaction		
<u>M</u>	3.55	3.27
<u>SD</u>	.56	.69
<u>n</u>	33	31
Power of test	= .77	
Trainee Test Scores		
<u>M</u>	15.06	15.84
<u>SD</u>	6.67	7.02
<u>n</u>	33	31
Power of test	= .05	

Table 8

Analysis of Covariance for Trainee Learning by Trainer
Self-Monitoring with Trainers Excel Knowledge

Source	df	SS	F	Sig of F
Within+ Residual	60	2611.54		
Regression	1	278.87	6.41	.014
Trainer Self- Monitoring	1	2.27	.05	.820
(Model)	2	4.13	5.70	.044
(Total)	62	2897.75		

R-Squared = .099

Covariate	B	t-value	Sig of t
Excel knowledge	.18	2.53	.014

Table 9

Mean Satisfaction and Test Scores based on Different Levels of Excel Knowledge.

Trainee Satisfaction		
Level of Excel Knowledge ^a	M	n
1	3.21	25
2	3.45	14
3	3.40	12
4	3.81	12

Trainee Test Score		
1	13.88	25
2	13.50	14
3	17.42	12
4	19.25	12

Note. Total number of trainees equals 64 due total incomplete data for 1 trainee.

^aExcel Knowledge was grouped by self reported frequency of use: 1 = 0 times, 2 = 1-2 times, 3 = 3-10 times, and 4 = more than 10 times

Table 10

The Means and Standard Deviations for Each Gender

	<u>Males</u>		
	M	SD	n
Trainee Satisfaction	3.42	.57	21
Trainee Test Scores	14.57	7.62	21
Excel Knowledge	1.46	1.38	24
Self-monitoring	12.48	5.14	25

	<u>Females</u>		
Trainee Satisfaction	3.41	.68	43
Trainee Test Scores	15.86	6.41	43
Excel Knowledge	1.14	1.16	50
Self-monitoring	8.80	5.14	50

Note. The differences in group size are caused by either the one person missing Excel Knowledge data or the 11 trainers not taking the satisfaction survey or test.

Table 11

Observational Information about the Behaviors of Self-Monitors

	Self-monitoring	
	High	Low
<u>Verbal Behaviors</u>		
"I"		
<u>M</u>	1.30	.30
<u>Sd</u>	1.35	.27
"We"		
<u>M</u>	11.80	5.90
<u>SD</u>	7.83	3.51
^a Positive		
<u>M</u>	7.30	3.20
<u>SD</u>	5.56	2.71
^b Negative		
<u>M</u>	.20	.80
<u>SD</u>	.45	.76

Table 11 (continued)

Observational Information about the Behaviors of Self-Monitors

	Self-monitoring	
	High	Low
<u>Physical Behaviors</u>		
^c Point		
<u>M</u>	9.60	15.30
<u>SD</u>	9.18	6.86
^d Time		
<u>M</u>	37.90	7.85
<u>SD</u>	28.90	10.63

Note. The values equal the average frequency of occurrence.

The size for both high and low self-monitoring trainer groups is 5. One trainer's session was used as a pilot leaving $n = 10$.

^aPositive refers to the frequency of positive feedback on trainee performance given by the trainer. ^bNegative refers to the frequency of negative feedback on trainee performance was given by the trainer. ^cPoint refers to the frequency the trainer pointed to the computer screen to illustrate an instruction. ^dTime refers to the length of time the trainer spent training.

References

Allen, M. J., & Yen, W. M. (1979). Introduction to Measurement Theory. Monterey: Brooks/Cole Publishing.

Anderson, L. R. (1987). Self-monitoring and performance in nontraditional occupations. Basic and Applied Social Psychology, 8(1-2), 85-96.

Anderson, L. R. (1990). Toward a two-track model of leadership training suggestions from self monitoring theory. Small Group Research, 21(2), 147-167.

Anderson, L. R., & McLenigan, M. (1987). Sex differences in the relationship between self-monitoring and leader behavior. Small Group Behavior, 18(2) 147-167.

Anderson, S. D., & Wanberg, K. W. (1991). A convergent validity model of emergence leadership in groups. Small Group Research, 22, 380-397.

Aronson, E., Brewer, M. B., & Carlsmith, J. M. (1985). Experimentation in social psychology. In G. Lindzey & E. Aronson (Eds.), Handbook of Social Psychology (1st ed., pp. 441-484). Hillsdale, NJ: Erlbaum.

Ayman, R. & Chemers, M. (1991). The effect of leadership match on subordinate satisfaction in Mexican organizations: Some moderating influences of self-monitoring. Applied Psychology: An International Review, 40(3), 229-314.

Baltes, P. B. (1987). Theoretical propositions of life-span developmental psychology: On the dynamics between growth and decline. Developmental Psychology, 23, 611-626.

Briggs, S. R., Cheek, J. M., & Buss, A. H. (1980) An analysis of the self-monitoring scale. Journal of Personality and Social Psychology, 38, 679-686.

Cascio, W. F., & Zammuto, R. F. (1987). Societal trends and staffing policies. Denver: University of Colorado Press (From Goldstein, E. L., 1993, Training in Organizations, 3rd ed.).

Cook, J. D., Hepworth, S. J., Wall, T. D. & Warr, P. B. (1981). The Experience of Work (pp. 226-264). New York: Academic Press.

Coyne, J. C., & Downey, G. (1991). Social factors and psychopathology. Annual Review of Sociology, 14, 293-318.

Cronshaw, S. F. & Ellis, R. J. (1991). A process investigation of self monitoring and leader emergence. Small Group Research, 22(4), 403 - 420.

Dobbins, G. H., Cardy, R. L., & Truxillo, D. (1988). The effects of individual differences in stereotypes of women and purpose of appraisal on sex differences in performance ratings: A laboratory and field study. Journal of Applied Psychology, 73, 551-558.

Dobbins, G. H., Long, W. S., Dedrick, E. J., & Clemons, T. C. (1990). The role of self-monitoring and gender on leader emergence: A laboratory and field study. Journal of Management, 16(3), 609-618.

Ellis, R. J. (1988). Self-monitoring and leadership emergence in groups. Personality and Social Psychology Bulletin. 14(4), 681-693.

Ellis, R. J., Adamson, R. S., Deszca, G. & Cawsey, T. F. (1988). Self-monitoring and leadership emergence. Small Group Behavior, 19(3), 312-324.

Ellis, R. J., & Cronshaw, S. F. (1992). Self-monitoring and leader emergence: a test of moderator effects. Small Group Research, 23(1), 113-129.

Garland, J., & Beard, J. F. (1979). Relationship between self-monitoring and leader emergence across two task situations. Journal of Applied Psychology, 64, 72-76.

Gordon, J., Zemke, R., and Jones, P. (1988). Designing and Delivering Cost Effective Training. Lakewood Books.

Goldstein, E. L. (1993). Training in Organizations (3rd ed.). Pacific Grove: Brooks/Cole Publishing.

Hudson, F. C. (1991). The Adult years: Mastering the Art of Self Renewal (1st ed.). San Francisco: Jossey - Bass Inc.

Kail, R. V., & Cavanaugh, J. C. (1996). Human Development. Pacific Grove: Brooks/Cole Publishing.

Kenny, D. A., & Zaccaro, S. J., (1983). An estimate of variance due to trait in leadership. Journal of Applied Psychology, 68, 678-85.

Kent, R. L., & Moss, S. E. (1990). Self-monitoring as a predictor of leader emergence. Psychological Reports, 66, 875-881.

Kirkpatrick, D. (1996). Great ideas revisited: Revisiting Kirkpatrick's four - level model. Training & Development, 50(1), 54-57.

Knowles, M. S. (1987). Adult learning. In Craig, R. L. (Ed). Training and Development Handbook: A Guide to Human Resource Development (3rd ed., pp. 168-178). New York, NY: McGraw-Hill.

Lennox, R., & Wolfe, R. (1984). Revision of the self-monitoring scale. Journal of Personality and Social Psychology, 46, 1349-1364.

Lord, R. G., DeVader, C. L., & Alliger, G. M. (1986). A meta analysis of the relation between personality traits and leadership perceptions: An application of validity generalization procedures. Journal of Applied Psychology, 71, 402-410.

Mathieu, J. W., Mathieu, J. E., and Tannenbaum, S. L. (1993). Individual and situational influences on the development of self-efficacy: Implications for training effectiveness. Personnel Psychology, 46, 125-145.

Ree, M. J., Carretta, T. R., Teachout, M. S. (1995). Role of ability and prior job knowledge in complex training performance. Journal of Applied Psychology, 80, (6), 721-730.

Schein, E. H. (1992). Organizational Culture and Leadership (2nd ed.). San Francisco: Jossey-Bass Inc.

Snyder, M. (1974). Self-monitoring of expressive behavior. Journal of Personality and Social Psychology, 30, 526-537.

Snyder, M. (1979). Self-monitoring processes. In L Berkowitz (Ed.). Advances in Experimental Social Psychology (12th ed., pp. 247-305). New York: Academic.

Snyder, M. & Gangestad, S. (1986). On the nature of self-monitoring: Assessment, matters of validity. Journal of Personality and Social Psychology, 51(1), 125-139.

Wlodkowski, R. J. (1986). Enhancing Adult Motivation to Learn : A Guide to Improving Instruction and Increasing Learner Achievement. San Francisco: Jossey- Bass.

Zaccaro, S. J., Foti, R. J., & Kenny, D. A. (1991). Self-monitoring and trait-based variance in leadership: An

investigation of leader flexibility across multiple group situations. Journal of Applied Psychology, 76(2), 308 - 315.