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**EMPIRICAL INVESTIGATION INTO THE PATH-GOAL
LEADERSHIP THEORY IN THE CENTRAL BANK FRATERNITY:
LEADERSHIP STYLES AND JOB SATISFACTION**

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Abstract

The paper attempts to investigate the validity of the Path-Goal leadership theory in the central bank fraternity, in particular the relationship between leader style and job satisfaction. From the point of view of subordinates, we survey the perceived leadership styles of central bank managers and conduct an empirical study to determine whether the perceived leadership styles have any significant relationships with subordinates' job performance/satisfaction across the central banks. The results indicate that in the central bank fraternity, the perceived participative leadership style has a consistent positive effect on job satisfaction of subordinates. This result is generally consistent across genders, age groups, number of years of working experience, education background and the department in which they work. This finding has implicit implications for the motivation of subordinates to stay focused and perform better. For supervisors, they must be flexible enough to exercise the appropriate leadership styles at the right situation.

Keywords: Path Goal Theory, Leadership styles, Job Performance, Job Satisfaction

JEL Classification: M12

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1. Leadership in Central Banks

According to Sheard and Kakabadse (2002, p. 129), '[t]he increasingly fast-moving and competitive environment all organizations face demands leadership skills to make their organizations prosper.' These challenges demand that all organizations, central banks alike, apply innovative leadership approaches and strategies for new practical and effective solutions in the current era of uncertainty. As there are similarities in the way a central bank operates within the same environment, it has been argued that leadership in the central bank is no different from other organizations. The main difference is the role perspective where a central bank is a regulator and a leader in the management of the economy (Charafeddine, 2016). In addition, the central bank is a high impact organization, where any decisions or indecisions, actions or inactions can affect the entire economy (Zeti, 2015). Because central banks are policy-making bodies, ensuring employees' engagement and involvement is even more challenging. Given this situation, leaders in central banks, apart from strategizing, must be masters in motivation and people mobilization (Charafeddine, 2016).

The European Central Bank first introduced core management competencies in 2004 (Fehlker, 2004). They consist of 5 domains, namely, information-oriented competencies, task-oriented competencies, people management competencies, interpersonal competencies and personal competencies. However, it is clear that central banks still lack global consensus on what constitutes a 'competent' central banker (Brits and Veldsman, 2014). Leadership or management competencies related to leading and managing people are undeniably important.

This study thus intends to conduct an empirical investigation into the Path-Goal leadership Theory within the central bank fraternity, particularly to study the relationship between leadership styles and job satisfaction. As far as the authors are aware, there has been no such study conducted for regional central banks.

2. A Brief Review of the Development of Leadership Theory

There are several approaches to the theory of leadership. Among them are the Great Man Theory, the Trait Theory, Behavioral, Contingency and more recently Transactional and Transformational Theories. The Great Man Theory and the Trait Theory were the first leadership theories to be systematically studied (Bass 1990; Gray and Smeltzer, 1989). The Great Man Theory assumes there are very rare individuals in a given society with unique characteristics to lead. In other words, leaders are born and not made. On the other hand, the Trait Theory endeavored to determine the personal, psychological, and physical traits of strong leaders, and it was the dominating leadership theory during the first half of the twentieth century (Chemers, 1997). However, by the 1950s, the Trait Theory was abandoned as it totally ignored the

situational and environmental factors that played a role in a leader's level of effectiveness (Sorenson, 2000).

After the Second World War, the Behavioral Approach emerged as the main concept in leadership studies for a period of almost 30 years (Littrell, 2002). This Approach attempts to determine what successful leaders did, and deciphers behaviors that differentiated leaders from followers (Hemphill and Coons, 1957). The main argument of this Approach is that leadership is not necessarily an inborn trait. Behaviors can be learned, and so individuals trained in appropriate leader behaviors would be able to lead more effectively (Stoner and Freeman, 1989; Robbins, 2001). Behavioral Approaches, similar to Trait Approaches, fell out of favor because there was no consideration in the theory for situations for which behaviors can be demonstrated (Ivancevich; Szlagyi and Wallace, 1977).

Almost all the leadership theories developed up to the stage of the Behavioral Approach assumed that there is only one best way to lead and that it could be applied universally. However, since in many circumstances, researchers could not find traits that were common to all effective leaders, or a universal leader behavior that was effective under all situations, they began trying to identify the factors in each situation that could influence the effectiveness of a particular leadership style (Stoner and Freeman, 1989). Consequently, a third major approach emerged in the form of the Contingency Theories. These Theories suggest that the appropriate way to lead is contingent upon the situation that the leader is in. One major contingency model is the Path-Goal Theory developed by House (1971). The theory asserts that subordinates would see a particular leadership style as acceptable if the style is an immediate source of satisfaction or an instrument for future satisfaction (House and Dessler, 1974).

Subsequent to the Contingency Approach, further research and discussions on leadership moved in different directions. One major direction of research stresses the unique characteristics of leaders which have significant effects on their groups or organizations, leading to the development of the Transformational Leadership Theory (Burns, 1978). In the Transformational Leadership Model, leadership is a mutual process between the leaders and the followers whereby the leadership creates visions and connection that result in increased motivation for both to pursue the end goals. Transformational Leadership is particularly relevant for identifying the needed change and carrying out the changes together with the group. Meanwhile, Transactional Leadership styles focus entirely on tasks, rewards and punishments to motivate followers (Nikezić; Purić and Purić, 2012).

3. The Path-Goal Theory (PGT)

The PGT, based on the Expectancy Motivation Theory, sees motivation as the corner stone of performance and job satisfaction (Evans, 1970).² Motivation enables people to tackle challenges and stay focused on their goal, irrespective of whether they are personal or professional goals and targets (Baumeister and Voh, 2004). As leadership is the single most important factor in motivating employees and improving productivity (Fulop and Linstead, 1999), the Path-Goal Theory proposes four types of leadership qualities for motivating subordinates, for which an effective leader can use depending on the situations. From another view point, it can even suggest situations for which a particular leadership style is irrelevant and unimportant in terms of motivating staff. The Path-Goal Theory is among the first leadership theories that convincingly specify multiple leader behaviors (Jermier, 1996).

Firstly, the Directive Leadership style lets subordinates know what they are expected to do by the giving of specific guidance, rules and procedures for the subordinates to follow. The subordinates know exactly what is expected of them, but they do not participate (House, 1971, 1996; House and Mitchell, 1974). The Directive Leadership style is applicable when the subordinates are inexperienced, the task is unstructured and complex, the guidelines and work procedures are not well formalized, or where insufficient feedback is given to the subordinates (Fry; Kerr and Lee, 1986; Keller, 1989). On the other hand, the Supportive Leadership style is directed towards giving consideration to the needs and welfare of subordinates. The Supportive Leader creates a friendly climate in the workplace and is open and approachable. He/she also helps to reduce work stress, and at the same time, alleviates work frustration for his/her subordinates. This leadership style is appropriate when the subordinates do not have confidence in their work as the supportive leader behavior can lead to self-confidence and social satisfaction of the subordinates.

Meanwhile, the Participative Leader consults with subordinates and take into account their suggestions in the decision making process. In situations where the task is unstructured and the subordinates have a strong sense of achievement together with a high need for autonomy, the leader should exhibit participative leadership style. It is important to note that while the participative leader 'consults' his subordinates, the final decisions still rest with him/her.

² In 1996, House reformulated his original Path-Goal Theory and extended his original theory from four leadership styles to eight: (a) directive, (b) supportive, (c) participative, (d) achievement-oriented behavior, (e) work facilitation, (f) group-oriented decision process, (g) work-group representation and networking, and (h) value-based leader behavior (House, 1996). However, the essence of the Reformulated Path-Goal Theory remains the same as the 1971 Model and the modified 1974 Model; which is, effective leaders help their subordinates by giving them what is missing in their work environment and by helping them to overcome their inabilities (House, 1996; Northouse, 2002).

On the contrary, the achievement-oriented leader sets challenging goals and define standards. Subordinates are to perform at their highest level and to continuously seek improvement in performance. Achievement-oriented leadership style can be seen as a form of reinforcement because it can clarify changing goals and paths in response to the past success of the subordinates at achieving goals. Higher intrinsic job satisfaction should result from this leadership behavior since it gives subordinates the responsibility to set and achieve challenging goals (House, 1971, 1996; House and Dessler, 1974; House and Mitchell, 1974).

4. Situational Moderators

In the Path-Goal Theory, there are two situational moderators or moderating contingency factors, namely: subordinate personal characteristics and environmental (or task) characteristics. According to the PGT, subordinate personal characteristics affect how subordinates interpret and accept their manager's leadership style in a particular situation. These characteristics determine the extent to which the subordinates find the leadership style of their supervisors to be acceptable and instrumental to their obtaining the desired outcomes and immediate or future source of job satisfaction (House, 1971; House and Dessler, 1974; Northouse, 2003; Yukl, 2002). The characteristics include the subordinates' level of authoritarianism (dogmatic close-mindedness, rigidity of the subordinates), desires for control (personality construct locus of control which can be internal or external), needs for affiliation, preferences for structure, and self-perception of their own ability to perform a specific task (House, 1971; House and Dessler, 1974; Northouse, 2003; Yukl, 2002). This is, however, beyond the scope of this study as it may require extensive evaluation of the individual's personal characteristics.

Meanwhile the environmental or task characteristics are not within the control of the subordinates but any of them can affect the subordinates by motivating or constraining them (House and Mitchell, 1974). The three key environmental variables are (House and Mitchell, 1974):

1. The task structure (design and nature of the subordinates' task);
2. The formal authority system (the formal authority structure of the organization); and,
3. The primary work group (group relationship norms and values of the subordinates).

Table 1
Leadership Styles and Task Characteristics

Leaderships styles	Description	Situations when it is Effective
Directive	Focus on communicating goals and expectation	Tasks are unstructured, or when tasks are complex and team members are inexperienced
Supportive	Focus on building relationship and provide psychological support	When tasks are structured, repetitive or stressful, to boost confidence of subordinates
Participative	Focus on mutual participation	When the task is unstructured, complex and challenging, and when your subordinates want to contribute to decision making
Achievement-oriented	Setting challenging goals	When the task is unstructured, achievement-oriented leaders show 'confidence that subordinates will attain high standards'

The task structure is defined as the job level held by the workers (Sims and Szilagyi, 1975). Hence, it is a characteristic of the task of the worker, not the worker himself/herself. According to the theory, unstructured tasks are more challenging and more intrinsically satisfying, and hence, less frustrating and less stressful to the subordinates. On the other hand, highly structured tasks are assumed to be a source of frustration and stress for the subordinates, and hence, are inherently less satisfying.

When the task in a job is unambiguous, routinized, or clearly defined, the influence of the Directive Leadership style on subordinates will be negative (see Table 1). When the task is highly structured, less guidance is needed since the path to desired goals will be clearer to the subordinates. Under such work conditions, the Directive Leadership style may even be seen to be excessively controlling or even unnecessary. Similarly, the Participative Style is most effective when the task is unstructured and complex and there are opportunities for subordinates to contribute. Also in highly unstructured tasks, the Achievement-oriented Leadership style helps to increase the self-confidence of the subordinates leading to greater expectation of successfully accomplishing a challenging task or goal (Yukl, 2002). On the other hand, the Supportive Leadership style works best when the task is structured, repetitive and stressful, as this style can provide subordinates with the necessary 'human touch' with leaders using relationship to enhance the confidence of subordinates (Northouse, 2003).

5. Empirical Research

The earlier empirical research of the PGT was mixed (House and Mitchell, 1974; Schriesheim and Kerr, 1977; Schriesheim and Schriesheim, 1980; Stinson and Johnson, 1975). In their meta-analysis, Wofford and Liska (1993) reviewed 120 survey studies on the PGT and found that the empirical research did not seem to support the theory. However, they also noted that much of the research in their study was flawed. There were methodological deficiencies in many of the studies. It is possible that inadequate operationalization of the theory's constructs might have affected the support for the theory. For example, leader behaviors had not been adequately operationalized in some of the studies (e.g. House, 1971; Sims and Szilagyi, 1975; Stinson and Johnson, 1975). In later research, there was consensus that the empirical results did give considerable support for the theory (Schriesheim and DeNisi, 1981; Jermier, 1996). For instance, in her meta-analysis of more than 40 studies, Indvik (1985, 1986) found that there was support for the basic propositions of the PGT. In particular as the operational properties of the theory improved, there is now a body of research that supports the approach (Jermier, 1996). Empirical evidence also suggests that leaders who embrace relevant leadership styles under the PGT can make group work effective (Erenel, 2015).

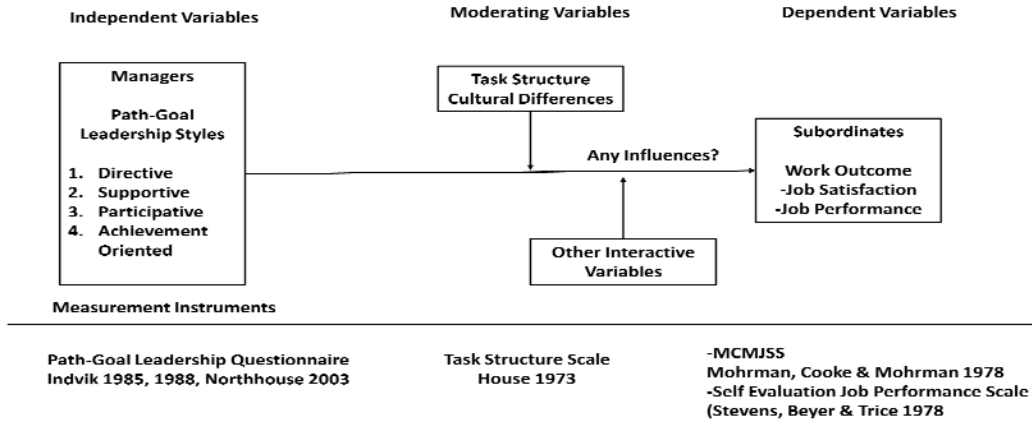
An interesting recent case study is that of the Columbia Record Company, a renowned music recording company (Vandegrift and Matusitz, 2011). The study found that under the PGT, leaders can be an inspiration to motivate employees by clarifying the path for them to achieve their performance goals. They also noted that in Columbia Records, executives and chairmen who adopted different but appropriate leadership styles depending on the situations, have made the music recording company the most successful in history.

6. Research Design and Methodology

6.1 The Estimated Model

In this study, a questionnaire survey was conducted for the SEACEN central banking fraternity and the pooled data was then used to analyze the relationship between leadership styles of supervisors as perceived by respondents and their self-evaluation of respondents' job performances and job satisfaction (See Chart 1).

Chart 1
Model of the Path-Goal Theory of Leadership



According to the PGT, a leader must carefully assess his subordinates’ personal characteristics and their task characteristics before implementing the appropriate leadership styles to match these two characteristics. The effective leader knows which styles to use and when to use them. The subordinates will accept the leadership styles when they perceive the leadership styles as helping them to attain their work goals. (House, 1971; House and Dessler, 1974; House and Mitchell, 1974).

The general equation is:

$$Y_i = \alpha_i + X_i\delta + W_i\beta + Z_iD + \epsilon_i \quad \text{Equation (1)}$$

$i = 1 \dots n$

where Y = perceived job performance/job satisfaction of subordinates by subordinates themselves, X = the matrix of perceived leadership, W = matrix containing interacting moderating variables and D_i = dummy variables for other interactive variables (gender, age, education level, etc.), n = sample size and ϵ_i are the error terms. The equation can be estimated using a pooled regression. Interactive terms between the leadership styles and task structure can be introduced.

6.2 Sample Procedure

SEACEN central banks were surveyed to measure subordinates’ perceived leadership styles, task characteristics, job performance and satisfaction. The respondents were junior to middle management staff. The sample data used is from the SEACEN Alumni database. SEACEN Alumni are staff from SEACEN member banks who have participated in SEACEN research and training programs from 2012-2015. The questionnaires adapted standard

instruments to establish reliability and validity (Maher and Kur, 1983).³ Electronic invitations were sent to prospective participants with a link to the online survey. The invitation message included an overview and purpose of the study. Anonymity and confidentiality were assured as it was mentioned in the survey questionnaire that no individual results would be disclosed to anyone in any form.

6.3 Measurement Instrument

6.3.1 Leadership Styles

The Path-Goal Leadership Questionnaire (Indvik 1985, 1988; Northouse, 2003, p. 142) which had been specifically designed so that respondents could provide information about their immediate supervisors regarding the four Path-Goal leadership styles: directive, supportive, participative, and achievement-oriented leadership styles was used. There were 20 items in the questionnaire, with 5 items for each leadership style. Questions relevant to particular styles of leadership were added for individuals and interpreted accordingly (Northouse, 2003) (see Appendix 1 for detailed questionnaire and Table 2 for the interpretation of the scale of leadership styles).⁴ However, it should be noted that the survey did not identify which leadership style a particular question was associated with.

6.3.2 Job Satisfaction

The level of self-perceived job satisfaction of the subordinates was measured using the Mohrman-Cooke-Mohrman Job Satisfaction Scale (Mohrman; Cooke and Mohrman, 1978) which is referred to as the MCMJSS. The MCMJSS had been designed based on the Motivation-Hygiene Theory of Herzberg (Herzberg, 1969, 1976; Herzberg; Mausner and Snyderman, 1959) which described intrinsic satisfiers, or motivators, and extrinsic satisfiers. On the MCMJSS, the average score for total job satisfaction can be obtained from the total scores of both the intrinsic satisfaction and extrinsic satisfaction (Herzberg, 1969).

6.3.3 Job Performance

Meanwhile, job performance is measured by the self-appraisal approach designed by Stevens, Beyer and Trice (1978), and adopted by Al-Gattan (1985). The instrument measured two dimensions of job performance, namely, quality of performance and productivity. The first two items in the questionnaire assessed the quality of performance and productivity of the

³ In summary, the Questionnaire consists of five sections, namely, (1) Demographic Background (2) Leadership Scale (3) Task Structure Scale, (4) Job Satisfaction Scale and (5) Job Performance Scale.

⁴ For some questions, by way of construction, the scores are reversed before adding them up and averaged.

subordinates in their own jobs, while the next two items assessed their quality of performance and productivity compared with their peers doing similar jobs. Scores on the four items are averaged to give the summary score of level of job performance.

6.3.4 Task Structure

The Task Structure scale (House, 1973) was used to measure the task structure variable. This scale was designed to measure the degree to which the subordinates' task stimuli and execution rules are simple, unambiguous and repetitive. From the scores of the ten items on the scale, a mean is calculated. Some of the questions were purposely designed to measure the degree of task structure in a reverse order. As such, for adding purposes, the score of these items was reversed. For scoring, the higher the score, the greater is the task structure (see Appendix 2B).

7. Empirical Results

7.1 Demographics Statistics

The questionnaire survey was sent to 1269 persons for which 275 responses were received, registering a response rate of 21%.⁵ While responses were received from 19 member central banks, respondents from 13 member central banks made up about 96% of the total responses (Appendix 3). From the descriptive statistics (Appendix 4), the ratio of female to male responses was 44.4% to 55.6% respectively with most respondents between 31-50 years old. About 98% of the respondents have graduate and advanced degrees. As for the years of experience in the central banks, more than half of the respondents have more than 10 years of experience (56.4%). The Cronbach's Alpha coefficients for reliability for leadership, job performance and job satisfaction were all greater than 0.70, indicating that these instruments were reliable for use in this context. Meanwhile, the instrument for task structure has a Cronbach's Alpha coefficient of 0.62, which is deemed acceptable (see Appendix 5).

From the calculated scores (Table 2), it is observed that the Participative Leadership style ranked the highest, even well above the high score scale (the empirical score against the high score) while Achievement-oriented leadership style is ranked close to the high score. Meanwhile, respondents ranked the Directive Leadership style close to the average score. On the other hand, Supportive Leadership style was ranked close to the lower scale. From this, it can be deduced that subordinates perceived their supervisors as mostly practising Participative and Achievement-oriented leadership styles. It is also noted that there are very few outliers in the responses (see Boxplot, Appendix 6).

⁵ Conducted in May 2015.

Table 2
Scores of the Leadership Styles Variables*

The scores for the four leadership styles are can be interpreted as (Northouse 2003, p. 143) as follows:

<i>Leadership Styles</i>	Low	Average Score	High	Empirical Score	Standard Deviation	Empirical minus High
Directive	18	23	28	24.05	5.31	-3.95
Supportive	23	28	33	23.75	5.85	-9.25
Participative	16	21	26	28.40	6.69	+2.4
Achievement	14	19	24	23.87	5.44	-0.13

The empirical scores and standard deviation of Directive, Supportive, Participative and Achievement are measurement of leadership styles derived from the survey using the Path-Goal Leadership Questionnaire. The rest of the scores are from (Northouse, 2003). For example, for the Directive Leadership style, the average score is 23 - scores above 28 are considered high while scores below 18 are considered low.

Using pooled regression, it is clear that all the leadership styles have no effect on job performance.⁶ The results could be due to the fact that it is extremely difficult to measure performance using a survey by means of evaluation methods due to deficiencies in self-ratings, such as low validity and leniency (Ashford and Cummings, 1985). However, if we use job satisfaction as the dependent variable, the Participative Leadership has a significant effect on job satisfaction in contrast to the other three styles, which have no effect (see Appendix 7). This is not surprising given that the Participative Leadership style was rated much higher (the empirical score) than the high score as interpreted by (Northouse 2003). This indicates that subordinates working in a central banking environment may prefer to share in the decision-making process where supervisors value suggestions and take these into serious consideration. This, in turn, leads to increased job satisfaction of subordinates. It is also noted that the results are, in general, consistent across gender, age groups, years of working experience, educational background and the departments in which they work.⁷ Meanwhile, there is some evidence to indicate that for the Task moderating variable, the greater the task structure, the lower is the positive contribution of the Participative Leadership style to job satisfaction. This is consistent with the PGT.

⁶ The results are not reported.

⁷ House and Dessler (1974) have noted that the PGT has been explicitly left open to the incorporation of additional moderating variables that could affect the effectiveness of a particular leadership style.

8. Conclusion

An effective leader is a motivator who ensures that effective performance and goal achievement are rewarded. According to the PGT, the task of the superior as a leader is to help to change perceptions of subordinates' ability to perform jobs and achieve work goals. From the theoretical point of view, the PGT provides a set of guidelines on how the different leadership styles interact with subordinates' characteristics and task types to influence the motivation of subordinates. The practical outcome of the theory is obvious. It provides leaders with a notion on how to choose an appropriate leadership style, given a particular team of subordinates who are required to do a task within the environmental demands of the task.

The survey conducted for lower to mid management level of the central banking fraternity, finds that respondents have rated their supervisors as mostly practising the Participative Leadership style. The results also show that subordinates are motivated by way of job satisfaction through Participative Leadership, although such a preference is moderated by the task structure. Given that Participative Leaders include subordinates in decision-making, lateral communication is therefore important among central bankers whose tasks requires a mix of different skills (Chandavarkar, 1996). In other words, the relationship between superiors and subordinates should reflect shared values rather than hierarchical status. For practical implementation, supervisors must (1) be flexible enough to exercise their leadership style, according to the situation (2) re-evaluate the communicational links with their subordinates, when necessary.

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Questionnaire

SECTION 1: DEMOGRAPHIC BACKGROUND

Please complete your background data by circling the appropriate response to each question.

1. What is your age?
 1. 20-30
 2. 31-40
 3. 41-50
 4. 51 and above
2. What is your gender?
 1. Male
 2. Female
3. Number of Years with your current central bank
 1. 1-5 years
 2. 6-10 years
 3. 11-15 years
 4. 16 years and above
4. Please indicate your Educational Background
 1. College Diploma
 2. University Degree/Professional Qualification
 3. Graduate Degree
5. Select the Central Bank/Monetary Authority you work for
6. Please state the department you work for

SECTION 2: LEADERSHIP SCALE

This Section contains questions about the leadership styles of your manager/supervisor. Indicate how often each statement is true of your manager's leader behavior. Please describe your immediately manager/supervisor as accurately and as objectively as possible

(Note: The gender 'He' is used for the ease of convenience; it should refer to both a male or female manager/supervisor.)

7. Please chose one for each line

1 = Never 2 = Hardly ever 3 = Seldom 4 = occasionally
5 = Often 6 = Usually 7 = Always

- 7(1) He lets subordinates know what is expected of them. 1 2 3 4 5 6 7

7(2)	He maintains a friendly working relationship with subordinates.	1	2	3	4	5	6	7
7(3)	He consults with subordinates when facing a problem	1	2	3	4	5	6	7
7(4)	He listens receptively to subordinates' ideas and suggestions.	1	2	3	4	5	6	7
7(5)	He informs subordinates about what needs to be done and how it needs to be done.	1	2	3	4	5	6	7
7(6)	He lets subordinates know that he expects them to perform at their highest level.	1	2	3	4	5	6	7
7(7)	He acts without consulting his subordinates.	1	2	3	4	5	6	7
7(8)	He does little things to make it pleasant to be a member of the group.	1	2	3	4	5	6	7
7(9)	He asks subordinates to follow standard rules and regulations.	1	2	3	4	5	6	7
7(10)	He sets goals for subordinates' performance that are quite challenging.	1	2	3	4	5	6	7
7(11)	He says things that hurt subordinates' personal feelings.	1	2	3	4	5	6	7
7(12)	He asks for suggestions from subordinates concerning how to carry out assignments.	1	2	3	4	5	6	7
7(13)	He encourages continual improvement in subordinates' performance.	1	2	3	4	5	6	7
7(14)	He explains the level of performance that is expected of subordinates.	1	2	3	4	5	6	7
7(15)	He helps subordinates overcome problems that stop them from carrying out their tasks.	1	2	3	4	5	6	7
7(16)	He shows that he has doubts about subordinates' ability to meet most objectives.	1	2	3	4	5	6	7
7(17)	He asks subordinates for suggestions on what assignments should be made.	1	2	3	4	5	6	7
7(18)	He gives vague explanations of what is expected of subordinates on the job.	1	2	3	4	5	6	7

- 7(19) He consistently sets challenging goals for subordinates to attain. 1 2 3 4 5 6 7
- 7(20) He behaves in a manner that is thoughtful of subordinates' personal needs. 1 2 3 4 5 6 7

SECTION 3: TASK STRUCTURE SCALE

This Section asks questions about the nature of the task structure of your job. Please do not use this Section to show how much you like or dislike your job. Just try to be as accurate as possible when you answer the questions.

8. Please choose one

1 = Never 2 = Seldom 3 = Sometimes 4 = Often 5 = Always

- 8(1) Problems which arise on my job can generally be solved by using standard procedures. 1 2 3 4 5
- 8(2) I can generally perform my job using standardized methods 1 2 3 4 5
- 8(3) Problems which I encounter in my job can generally be solved in a number of different ways 1 2 3 4 5

9. Please choose one

1 = Very low Structure 2 = Low 3 = Medium 4 = High 5 = Very high Structure

The tasks of some individuals are more "structured" than others: the goals are clearer, the methods to be used are more understood, and the problems are more repetitive and less unique, for example. Would you please rate what you feel is the degree of "structure" of your job by circling the best response.

1 2 3 4 5

Please circle one choice that is most appropriate to your case.

10. What is the average time it takes for you to complete a typical assignment? 5. One day or less
4. Between 1 and 3 days
3. Between 4 days and 7 days
2. Between 1 and 2 weeks
1. Longer than 2 weeks
11. How repetitious are your duties? 5. Very little
4. Some
3. Quite a bit
2. Very much
1. Almost completely

- | | | |
|-----|--|--|
| 12. | How similar are the tasks you perform in a typical work day? | 5. Almost all the same
4. Quite a few the same
3. Only a few the same
2. Very few the same
1. Almost all different |
| 13. | If you were to write a list of the exact activities you would be confirmed by on an average work day, what percent of these activities do you think would be interrupted by unexpected events? | 5. 81% - 100%
4. 61% - 80%
3. 41% - 60%
2. 21% - 40%
1. 0% - 20% |
| 14. | How much variety is there in the work tasks which you perform? | 5. Very much
4. Quite a bit
3. Some
2. Little
1. Very little |
| 15. | Every job is confronted by certain routine and repetitive demands. What percent of the activities or work demands connected with you job would you consider to be of a routine nature? | 5. 81% - 100%
4. 61% - 80%
3. 41% - 60%
2. 21% - 40%
1. 0% - 20% |

SECTION 4: JOB SATISFACTION SCALE

Intrinsic Satisfaction

16. Please indicate your level of satisfaction with various facets of your job by selecting one of the options on the scale after each of the statement.

1 = Very low 2 = Low 3 = Medium 4 = High 5 = Very High

- | | |
|--|-------------------|
| The feeling of self-esteem or self-respect you get from being in your job. | 1 2 3 4 5 |
| The opportunity for personal growth and development in you job. | 1 2 3 4 5 |
| The feeling of worthwhile accomplishment in your job. | 1 2 3 4 5 |
| Your present job when you consider the expectations you had when you took the job. | 1 2 3 4 5 |

Extrinsic Satisfaction

17. Please indicate your level of satisfaction with various facets of your job by selecting one of the options on the scale after each of the statement.

1 = Very low 2 = Low 3 = Medium 4 = High 5 = Very High

The amount of respect and fair treatment you receive from your superiors. 1 2 3 4 5

The feeling of being informed in your job. 1 2 3 4 5

The amount of supervision you receive. 1 2 3 4 5

The opportunity for participation in the determination of methods, procedures and goals. 1 2 3 4 5

SECTION 5: JOB PERFORMANCE SCALE

This Section contains questions on how your feel about your own job performance. Please answer by circling only one choice, and try to be as factual as possible.

1 = Very low 2 = Low 3 = Medium 4 = High 5 = Very High

Quality of your performance. 1 2 3 4 5

Your productivity on the job. 1 2 3 4 5

How do you evaluate the performance of your peers at their jobs compared with yourself doing the same kind of work? 1 2 3 4 5

How do you evaluate the performance of yourself at your job compared with your peers doing the same kind of work? 1 2 3 4 5

Appendix 2A

Scores of Leadership Styles

First, the scores for items 7(7), 7(11), 7(16), and 7(18) are reversed.

Then the average of the scores for each leadership style is calculated as follows:

1. Directive: Sum of scores on items 7(1), 7(5), 7(9), 7(14), and 7(18).
2. Supportive: Sum of scores on items 7(2), 7(8), 7(11), 7(15), and 7(20).
3. Participative: Sum of scores on items 7(3), 7(4), 7(7), 7(12), and 7(17).
4. Achievement-oriented: Sum of scores on items 7(6), 7(10), 7(13), 7(16) and 7(19).

Appendix 2B

Scores of Task Structure

First, the scores for items 8(3) 11, 13 and 14 are reversed.

Then the scores are of question 8(1), 8(2), 8(3) up to Question 15 are added and averaged.

Number of Responses from Member Banks

Member Banks	Count	Percent	Cumulative Percentage
1	57	20.73	20.7
2	47	17.09	37.8
3	32	11.64	49.5
4	20	7.27	56.7
5	18	6.55	63.3
6	16	5.82	69.1
7	14	5.09	74.2
8	14	5.09	79.3
9	13	4.73	84.0
10	12	4.36	88.4
11	7	2.55	90.9
12	6	2.18	93.1
13	6	2.18	95.3
14	3	1.09	96.4
15	3	1.09	97.5
16	2	0.73	98.2
17	2	0.73	98.9
18	2	0.73	99.7
19	1	0.36	100.0
Total	275	100.00	

Reponses of Participants from member banks in descending order of respondents.

Demographics Summary Statistics

Demographic Variables	Count	Percent
Gender		
Female	122	44.36
Male	153	55.64
Age		
20-30	55	20.00
31-40	99	36.00
41-50	94	34.18
50 Above	27	9.82
Education		
College Diploma	5	1.82
University/Professional	115	41.82
Advanced/Post Graduates	155	56.36
Experience		
1-5 Years	63	22.91
6-10 Years	57	20.73
11-15 Years	70	25.45
More Than 10 Years	85	30.91
Department		
Banking Supervision	39	14.18
Monetary/Research	38	13.81
Payment Systems	12	4.36
Others	84	30.54
N/A	102	67.3

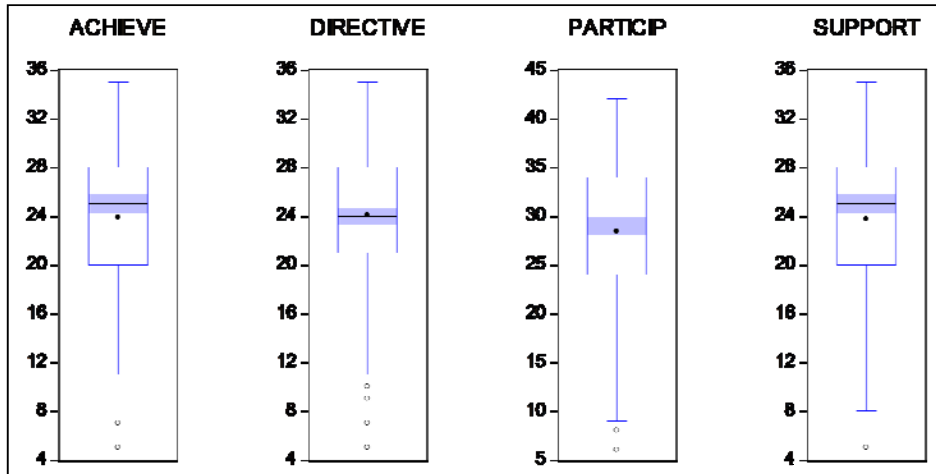
Cronbach's Alpha Coefficients for the Instruments

Constructs/Variables	No of Items	Cronbach's Alpha Coefficient (α)
Leadership		
Achievement	5	0.76
Directive	5	0.73
Participative	5	0.79
Support	5	0.78
Job Satisfaction	4	0.89
Job Performance	4	0.71
Task Structure	10	0.62

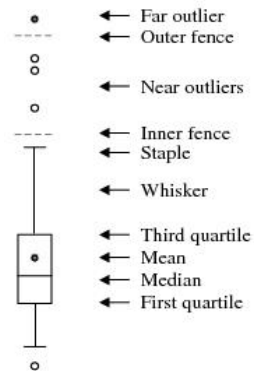
Cronbach's Alpha Coefficient (α) is a measure used to assess the reliability, or internal consistency, of a set of scale or test items, that is, α measures the average inter-item correlation

- $\alpha \geq 0.9$ Excellent
- $0.7 \leq \alpha < 0.9$ Good
- $0.6 \leq \alpha < 0.7$ Acceptable
- $0.5 \leq \alpha < 0.6$ Poor
- $\alpha < 0.5$ Unacceptable

Boxplot of Scales of Leadership Styles



A boxplot, also known as a box and whisker diagram, summarizes the distribution of a set of data by displaying the centering and spread of the data using a few primary elements.



The box portion of a boxplot represents the first and third quartiles (middle 50 percent of the data). These two quartiles are collectively termed the *hinges*, and the difference between them represents the *interquartile range*, or IQR. The median is depicted using a line through the center of the box, while the mean is drawn using a symbol. Note that EViews computes the median for boxplots using the Rankit method.

The *inner fences* are defined as the first quartile minus $1.5 \times \text{IQR}$ and the third quartile plus $1.5 \times \text{IQR}$. The inner fences are typically not drawn in boxplots, but graphic elements known as *whiskers* and *staples* show the values that are outside the first and third quartiles, but within the inner fences. The staple is a line drawn at the last data point within (or equal to) each of the inner fences. Whiskers are lines drawn from each hinge to the corresponding staple.

Data points outside the inner fence are known as *outliers*. To further characterize outliers, we define the *outer fences* as the first quartile minus $3.0 \cdot \text{IQR}$ and the third quartile plus $3.0 \cdot \text{IQR}$. As with inner fences, outer fences are not typically drawn in boxplots. Data between the inner and outer fences are termed *near outliers*, and those outside the outer fence are referred to as *far outliers*. A data point lying on an outer fence is considered a near outlier (Eviews 9)

Appendix 7

Pooled Regressions 1/

	EQ1			EQ2			EQ3			EQ4			EQ5			EQ6		
	Coeff	Prob		Coeff	Prob		Coeff	Prob		Coeff	Prob		Coeff	Prob		Coeff	Prob	
C	1.536	0.000	***	1.552	0.000	***	1.539	0.000	***	1.534	0.000	***	1.541	0.000	***	1.563	0.000	***
ACHIEVE	-0.085	0.289		-0.075	0.351		-0.089	0.267		-0.087	0.278		-0.081	0.314		-0.040	0.656	
SUPPORT	-0.031	0.640		-0.019	0.766		-0.028	0.670		-0.028	0.670		-0.033	0.614		-0.068	0.355	
PARTICIP	0.097	0.098	*	0.096	0.101	*	0.097	0.098	*	0.095	0.107	*	0.100	0.085	*	0.146	0.035	**
DIRECTIVE	0.064	0.445		0.052	0.536		0.067	0.423		0.067	0.408		0.062	0.460		0.009	0.933	
TASK*PARTICIP	-0.028	0.132	*(-)	-0.027	0.147	*(-)	-0.028	0.137	*(-)	-0.027	0.153	*(-)	-0.029	0.118	*(-)	-0.040	0.066	*
TASK*ACHIEVE	0.032	0.210		0.030	0.236		0.034	0.190		0.033	0.204		0.031	0.226		0.019	0.500	
TASK*SUPPORT	0.016	0.452		0.013	0.545		0.015	0.481		0.015	0.474		0.017	0.422		0.028	0.246	
TASK*DIRECTIVE	-0.010	0.707		-0.008	0.776		-0.012	0.673		-0.012	0.660		-0.010	0.722		0.002	0.943	
(AGE=1)*PARTICIP				-0.009	0.043	**												
(AGE=2)*PARTICIP				-0.005	0.213													
(AGE=3)*PARTICIP				-0.001	0.769													
(GENDER=0)*PARTICIP							-0.001	0.507										
(EDU=1)*PARTICIP										0.003	0.504							
(EDU=2)*PARTICIP										-0.003	0.145	*(-)						
(EXPER=1)*PARTICIP													0.002	0.603				
(EXPER=2)*PARTICIP													-0.006	0.039				
(EXPER=3)*PARTICIP													0.002	0.538				
(DEPT=1)*PARTICIP																-0.003	0.442	
(DEPT=2)*PARTICIP																-0.002	0.671	
(DEPT=3)*PARTICIP																-0.001	0.869	
R-Squared		0.142			0.382			0.383			0.38			0.383			0.406	
Adjusted R-squared		0.117			0.364			0.36			0.36			0.362			0.363	
F-statistics		5.54	***		71.9	***		18.3	***		16.8			18.3	***		9.37	***

***, **, * represent significance at 1,5 and 10 percent. *(-) represent marginally significant at the 10% level.

The results of Job satisfaction is not reported. Total no of sample is 275 (Except for equation 5, which has a sample size of 163, due to incomplete responses).