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A STUDY OF THE GENERAL
PERFORMANCE APPRAISAL SYSTEM
AT TRIPLER ARMY MEDICAL CENTER

A Graduate Research Project
Submitted to the Faculty of
Baylor University
In Partial Fulfillment of the
Requirements for the Degree
of
Master of Health Administration

by

Captain Lawrence M. Johnson

August 1984

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I. INTRODUCTION

Development of the Problem

The 1978 U.S. Civil Service Reform Act (CSRA) placed great emphasis on the role of performance appraisal (PA) in the effective management of federal agencies. The act is applicable to over 1.7 million employees in almost 100 federal agencies.¹ Operations governed by CSRA are required to develop and implement systems which: "(1) provide for periodic appraisals of job performance of employees; (2) encourage employee participation in establishing performance objectives; and (3) use the results of performance appraisals as a basis for training, rewarding, reassigning, promoting, retaining, and separating employees."² The CSRA laid the groundwork for incorporating risks and rewards into government personnel policies.

This act did not emerge overnight, and a brief history of performance incentives in the federal sector will highlight the rationale underlying the reform. The Hoover commissions that functioned from 1947-49 and 1953-55 were tasked to focus on inefficiency. Recommendation Number 18 stated that the Civil Service Commission should have the authority to establish a system

to reward employees who performed "above and beyond".³ On the other hand, managers should also determine employees who have performed at unacceptable levels and dismiss them from federal service. The Performance Rating System that the Hoover commission evaluated had no teeth as satisfactory ratings were received by 98% of the workforce.⁴ A recommendation was made to establish annual ratings with five standard levels. The momentum to recognize performance over seniority began with this commission.

In 1975, the President's Panel On Federal Compensation, chaired by Vice President Nelson Rockefeller, considered changes in the area of compensation for the federal work force. Rockefeller's panel solicited comments from federal employees, private industry, professional associations, and the general public. The panel made a final recommendation for a procedure to link performance and within-grade pay increases.⁵ The concepts that emerged in the 1978 CSRA had their roots in the efforts of the Hoover and Rockefeller commissions.

Implementation of the CSRA was put on a fast track. Although the schedule has been delayed for a variety of reasons, the Reagan administration has expressed support for the performance appraisal provisions of the CSRA.

The General Performance Appraisal System (GPAS) was implemented by the Department of Defense on 1 October 1981. This system supported the CSRA guidelines established by the Office of Personnel Management (OPM). GPAS implementation required that considerable resources be allocated in the training of participants. OPM monitored the progress of the effort through on-site evaluations. One method of obtaining information on the progress of implementation was via survey. Measurement of attitudes and perceptions from supervisors and employees was a relatively low cost, short-term method for estimating how well the system was being implemented.

An OPM survey of personnel practices in Hawaii was conducted in August 1983. One objective of the evaluation was to assess the effectiveness of the GPAS. Findings obtained from employees at Tripler Army Medical Center (TAMC) revealed the attitudes and perceptions from a sample of 160 workers. TAMC responses were compared against 30,000 other responses received from surveys conducted at other federal installations. Although TAMC employees were more satisfied than the reference group in 50 of the 77 questions on the survey, 40% of the questions relating to personnel programs indicated worker dissatisfaction (Appendix A).⁶

Survey recommendations tasked the Civilian Personnel Office Hawaii (CPOH) to review those unsatisfactory areas and make necessary improvements.

The survey determined that 97% of the TAMC workforce had received written performance standards with critical and major job elements identified. Although the GPAS system was in place, dissatisfaction was noted in two related issues. The timeliness of processing personnel actions and the discussion of promotion/performance by supervisors were noted as needing improvement.

Performance appraisal is only one component of the civilian workforce personnel policy. However, it provides the best source of information for performance-based personnel decisions.⁷ Are there significant gaps between the GPAS as established by OPM and what is practiced at TAMC? GPAS is undergoing evolution, but the premise of measuring work performance is here to stay. Further study is needed to make mid-course corrections in the system and estimate how well implementation is proceeding. Healthy innovation that incorporates good ideas from analysis will insure that GPAS is responsive to change.

GPAS seeks to improve productivity by linking employee PA standards with organizational goals. Productivity of health care workers is considered a top priority of the Army Medical Department.⁸ Current emphasis is significant in the health care field where

labor costs have averaged 57% of total expenses over the past five years.⁹

The military health care system has recently become more cognizant of costs. Fiscal funding is based on projected workload in Medical Care Composite Units (MCCU). The Fiscal Year (FY) 1983 Command Performance Summary noted unfavorable trends in (1) Medical Care Personnel Staffing Ratio, (2) Medical Care Cost per MCCU, and (3) Medical Care Supply Cost per MCCU.¹⁰ The civilian workforce of 921 personnel that consumed 62% of the FY 1983 operating budget had a significant impact on those performance trends.¹¹

Productivity is measured as output (clinic visits, weighted procedures performed, etc.) in many areas of TAMC. However, it is difficult to measure individual contribution to the effort. GPAS provides the supervisor with an objective system to identify work elements and establish expected performance standards.

The job elements are developed in the context of the organizational goals and objectives.¹² The Work Results Method (WRM) operates best when the supervisor and employee work together to set standards and establish accountability.¹³

Productivity and motivation are related to performance appraisal, but it is not within the scope of this paper to examine the association. In the conduct of

this study, an analysis of the attitudes of TAMC civilian employees toward GPAS will be surveyed. Attitudinal data can be used to indirectly measure objective conditions concerning performance appraisal at TAMC.¹⁴

The development of the problem presented a historical perspective of PA in the federal civil service. The GPAS system was described as a revolutionary technique in support of the 1978 CSRA. OPM has used employee attitude surveys to indirectly measure implementation compliance. A recent survey of TAMC noted systemic problems with GPAS at Tripler.

A link between PA, motivation, and worker productivity was suggested. The current resource constraint dilemma facing the federal health care system requires federal agencies to demonstrate that they are using human resources efficiently. Fiscal indicators presented in the Command Performance Summary noted personnel related shortfalls at TAMC.

Further study is needed to validate the OPM survey and evaluate the effectiveness of corrective actions. A correlation variable of rating received is presented as a discriminator of employee perceptions and attitudes about GPAS as established at TAMC. Do employees, regardless of how their supervisors rate them, believe in the validity of the system? Are workers willing to meet or exceed standards in return for expected rewards?

The OPM survey data and FY83 Performance Summary findings pointed to the need for further study of the attitudes of TAMC employees concerning GPAS. A survey feedback technique is proposed to acquire timely information about those attitudes.¹⁵

The situation reviewed above led to the formulation of the research question: Does a positive relation exist between TAMC civilian employee GPAS attitude and performance rating level?

This research is necessary not only for the problems identified above, but because of numerous environmental factors that have emerged in the health care arena. Some of the current and projected parameters of economics, technology, government, and demographics that influence health care will be discussed during the literature review.

Limitations that narrow the research options center around the workforce at TAMC. The employee population is unique in the ethnic mix of assigned personnel. The ratio approximates that of the state of Hawaii. One third of the workforce is Caucasian, one third is Japanese, and the rest are of other races. The work environment is influenced by a climate and lifestyle that are desirable. The stable workforce is an indicator of the limited availability of comparable pay and benefits in civilian hospitals. Many factors enter into the attitudes of

employees. This research addresses the relation between GPAS attitude and rating received and does not examine general employee work satisfaction.

The mission of TAMC is unique in the Army Medical Department. The traditional teaching and patient care efforts are expanded to include responsibility for Veterans Administration and Trust Territories beneficiaries. These two groups of patients comprise 15% of the workload. TAMC has a tri-service mission and the majority of patients are active duty Navy.

Another environmental factor that may impact on employee attitude is the hospital itself. The building was built in the 1940's and working conditions in some areas are not optimal. The renovation plans for this decade will bring transitional stresses to the workplace.

Other research methodologies were considered but not applied in this study. Interviews, case studies, and analysis of records were determined to be more appropriate in complementing the attitude survey. Additional studies should incorporate these techniques to answer specific questions.

The civilian workforce will provide continuity for the future accelerated change that TAMC will experience. The hospital's tradition of providing optimal health care will be challenged to do more with constrained resources. The diverse and experienced civilian workforce must be

provided with performance guidance and receive incentives and guidance based on attainment of job standards. An understanding of employee attitudes concerning how they are evaluated by their supervisor is critical to obtain quality care through the management of people--our most valuable resource.

Review of the Literature

The literature is replete with research work in the area of performance appraisal. The difficulty of accurately measuring work performance has been one of the most vexing problems facing management. The related topics of work motivation and productivity also contain references to the role of performance appraisal. Much of this effort has focused around the establishment of systems of appraisal.

The literature review will concentrate on the research question which examined the area of GPAS attitude in relation to performance rating received. The works presented in this section follow a hierarchy from general to specific. Each study was evaluated in relation to the research question. The review was generally confined to the federal health care system. The limited amount of related effort in the same specific area as this research suggested the need for further analysis.

An environmental assessment published by the American Hospital Association (AHA), Overview: 1983 considered the development of comprehensive human resource management systems crucial to overall corporate strategy. To increase productivity, hospitals should develop enhanced performance and assessment measures. To analyze these measures, the attitudes of those being appraised should be monitored. The AHA assessment also predicted that hospitals will use employee incentive programs such as profit sharing, that reduce labor costs by stimulating increased productivity.¹⁶

The federal system is not directly concerned about "profit", however, system efficiency has been examined by audit agencies. A review was conducted in 1983 by the Army Audit Agency of TAMC Nutrition Care Division. The audit made several recommendations to improve the efficiency of the food service operation. A recent inspection of TAMC by the Health Services Inspector General emphasized the elimination of fraud, waste, and abuse.¹⁷

The American College of Hospital Administrators has recognized the importance of staff evaluation. The College offers seminars for professional development designed to provide greater understanding of the linkage between motivation and performance planning.¹⁸ A program objective is to help hospitals implement results oriented,

quantifiable programs. The federal government is committed to use GPAS in meeting this objective.

Smith and Elbert (1980) considered an integrated approach to performance appraisal as a foundation for comprehensive improvement of the delivery of health care services.¹⁹ High levels of education and professionalism germane to health and medical care have stimulated a demand for improved personal performance evaluation.²⁰

The immediate criteria of individual behavior can be influenced by evaluation. Personnel who perceive that improved performance results in increased compensation or benefits will usually have pronounced effort. The evaluation process should be the key that reinforces the belief that effective behavior leads to desired results.²¹

A study by Taylor and Zawacki (1984) showed that a collaborative appraisal system (GPAS) satisfied health care employees with a high need for achievement and development.²² Also noted was a significant improvement in these employees attitudes between traditional (trait based) and collaborative systems.²³ Organizations that have jobs where the tasks are varied and flexible with decision making were most satisfied with a collaborative system. It was suggested that only certain professional type positions will have the most positive attitudes toward a collaborative system.

Pajer (1984) presented three primary roles for which GPAS was designed: (1) GPAS will foster communication between supervisor and employee about what work should be done and how well it is expected to be accomplished. (2) GPAS will bring greater objectivity to the process through documentation. (3) GPAS will assure that through applying proper discipline to the process of appraisal, personnel decisions will result in greater equity and be perceived as fair by employees.²⁴ The realization of these roles is contingent on the behaviors of the participants. The validity of the system is based on the perceptions and attitudes of the supervisors and employees.

Toffler (1983) projected the theories of The Third Wave onto the government personnel environment.²⁵ Office environments will undergo massive changes by the 21st century. Pressures for reform are not going to be diminished, and PA systems must incorporate lessons learned to better integrate into the overall management of federal agencies. Results of PA actions must be both actual and perceived. Performance must not only be rewarded, but there must be a general understanding that it is and will continue to be rewarded.²⁶ Measurement of employee attitudes toward the system will enable it to be more responsive to strengthen that understanding.

Hospital specific attitudes toward personnel policies have declined according to a study by Holloway (1976). Employee satisfaction with performance appraisal has dropped at an alarming rate, suggesting that a revision of methods and techniques is needed.²⁷ The study concluded by proposing that a quantitative information system about employee attitudes is a helpful tool in analyzing employee relations.

A study of health care employees' attitudes concerning GPAS was conducted by DeMarco and Nigro (1983). The research focused on supervisor behavior in implementing GPAS as perceived by workers at four Navy research laboratories. This research strongly suggested that careful attention should be paid to how workers perceive and respond to the PA behaviors of their supervisors.²⁸ Attitude surveys were conducted in 1979, 1981, and 1982. The significant finding from these studies noted that worker perceptions of supervisory behaviors relative to GPAS implementation showed very little change.²⁹ Survey attitudes were obtained using the Federal Employee Attitude Survey and correlated with organizationally relevant behaviors such as absenteeism, turnover, and job satisfaction. Significant correlations were noted between supervisory behavior and attitudes toward the workplace.³⁰ Although the relationships among these variables are complex and by no means fully

explained, the study proposed that employee perceptions and attitudes are useful indicators of GPAS effectiveness.

The literature review has indicated that considerable general research has been applied to performance appraisal. The recent implementation of GPAS and the need to monitor progress is a timely and relevant topic for study. The attitude survey has been utilized as a vehicle to estimate the effectiveness of GPAS as a valid PA system. No studies were found that related health care worker GPAS attitude to the type of rating received. This outcome of the PA process may have a significant impact on employee attitudes toward the system.

The information obtained from this investigation can be applied to refine GPAS implementation at TAMC. The study of this research question at a health care facility has general applicability in the larger federal system. OPM, the proponent of the system, does not yet have a broad base of scientific information on attitudes among employees affected by GPAS reform policies.³¹

Research Methodology

The research methodology utilized in this study was organized into three phases: (1) design the survey instrument, (2) administer the survey to a random sample of employees, and (3) collect and test the significance of the results.

The survey instrument (Appendix B) was constructed using items from the Federal Employee Attitude Survey (FEAS). The seventeen questions focused on GPAS implementation and effectiveness at TAMC. This survey differed from the 1983 OPM questionnaire which contained only four GPAS related items. In both surveys employees selected from five response levels to indicate attitudes toward GPAS.

It is important to recognize that the questionnaire survey method will not be valid or reliable unless the research methodology was carefully designed. In this study the FEAS was considered to be an appropriate survey instrument.³² It has been administered to thousands of federal workers in various formats and a baseline response level has been established. The final survey question asked the employee to indicate the rating of their last performance appraisal received. The position of this final question was intentional. The motive was to reduce

attitude bias in the response of the worker. The design and focus of the survey enabled the worker to indicate attitudes about GPAS without resorting to subjective writing. Valid and reliable questionnaire items, in combination with methodologically sound sampling procedures, will generate highly accurate (representative) information about the target population.³³ The survey instrument was designed to support the research question.

The target group to be sampled consisted of GS-7 and above employees at TAMC. The population consists of 287 workers. The decision to not include all employee levels was deliberate. Because of the traditional differences between professional and technical jobs and because of the differences in their corresponding responsibilities and compensation, it is unlikely that a single survey instrument could always be applied to both levels. The sample group consisted of employees that represented 25 different clinical departments or administrative divisions at TAMC. The Departments of Pathology (39) and Nursing (37) had the largest employee groups sampled.

Employees in the GS-7 and above group are usually more involved in direct patient care and in decision making than are clerical or blue collar TAMC workers. Research emphasis was focused on this influential workforce.

The sample size was determined from a table based on population size.³⁴ A random sample was pulled from a computer generated list of employees identified by social security number (SSAN). The last digit of the SSAN was used to produce the random sample.

The administration of the survey was carefully planned to increase instrument reliability. The survey was addressed to the individual via a computer generated label. A packet of surveys was sent to the administrative officer for the department. A cover letter signed by the Chief of Staff was included with each survey. The message encouraged participation and honesty in the response. Completed surveys were returned directly to the Administrative Resident through the distribution system. The surveys were returned in envelopes to insure confidentiality.

A pilot survey of 30 employees was conducted. The purpose was to check the administration process and to determine if any ambiguous questions were reducing the reliability of the survey. One modification on the second page of the survey was made to clarify the response categories. The pilot survey indicated that the GPAS attitude questionnaire had the ability to measure the variables of the research question.

The survey questionnaire was administered and completed responses returned during May 1984. The return rate of 70% is consistent with rates for this type of mailed questionnaire.³⁵

Analysis of the survey data began with the scoring and editing of the questionnaires. Invalid responses were returned by 10% of the sample. These voided surveys were grouped in the following categories: no knowledge of GPAS (7), not yet appraised (6), on extended leave (3), and no longer assigned (3). The remaining 110 surveys were individually averaged to obtain mean GPAS attitude scores. The GPAS rating received was ranked on a five point scale. The following values were associated with the rating categories: (5) Exceptional, (4) Highly Successful, (3) Fully Successful, (2) Marginal, and (1) Unsatisfactory. The responses were now placed in a format that would facilitate statistical analysis.

The following statistical evaluations were performed on the data.

- (1) Prepare a scatter diagram of the variables of GPAS attitude and GPAS rating received.
- (2) Compute a sample correlation coefficient.
- (3) Test H_0 : Difference in variable means = 0 at the .05 level of significance and state conclusions.
- (4) Determine the p value for the tests.

(5) Conduct an item analysis of the questions to determine which items had >25% negative responses.

The variable data values were entered in a computer to obtain the answers for 1, 2, and 3 above. A standard statistical table was utilized to obtain the p values.³⁶

The individual question responses were entered into a computer to determine the response variation for each question. This data was converted to a percentage for analysis. Neutral responses were not counted and the other four categories were grouped accordingly to present a positive or negative reply.

Further study was conducted on the following groups: (1) Laboratory workers (N=33), (2) Nurses (N=14), (3) GPAS rating equals marginal or fully successful (N=40), (4) GPAS rating equals highly successful (N=42), and (5) GPAS rating equals exceptional (N=28). The results of these studies will be presented in the discussion. The purpose of this work was to determine the impact of position or rating received on GPAS attitude.

The data obtained and analyzed in this survey has practical significance. This information should be provided to TAMC management and workers through CPOH. The results can be utilized to identify GPAS problems, increase health care workers awareness of the system, and refine supervisory behavior. The data obtained through the survey and interpreted using the research design constitute the makings of a potentially useful feedback system. The results presented in the discussion generated from this research methodology will provide insight to worker attitudes toward GPAS.

FOOTNOTES

¹ Robert G. Pajer, "Performance Appraisal: a New Era for Federal Government Managers," Personnel Administrator, March 1984, p. 82.

² Public Law 95-454, October 13, 1978, 95th Congress, Title II, Federal Register.

³ Lynn Alfalla, "A Brief History of Performance Incentives," Management 4, No. 2 (Spring 1984): 21.

⁴ Ibid.

⁵ Ibid.

⁶ Office of Personnel Management Survey, August 1983, Tripler Army Medical Center.

⁷ Pajer, p. 89.

⁸ Information Paper "AMEDD Goals and Objectives," January 1983, p. 9.

⁹ "Overview 1983" American Hospital Association, Chicago: AHA Publishers, 1983, p. 8.

¹⁰ Command Performance Summary, FY 1983 4th Quarter, Tripler Army Medical Center, p. 2.

¹¹ Ibid. p. 17.

¹² Pajer, p. 85.

¹³ Ibid.

¹⁴ John J. DeMarco and Lloyd G. Nigro, "Using Employee Attitudes and Perceptions to Monitor Supervisory Implementation of CSRA Performance Appraisal Systems," Public Personnel Management Journal 4, No. 1 (Spring 1983): 45.

¹⁵ Ibid.

¹⁶ Overview 1983, p. 9.

¹⁷ Interview with Col. Thomas C. Jackson, Health Services Command Inspector General, June 5, 1984.

- ¹⁸ Information Paper, "Staff Evaluation: Improving Productivity through Performance Planning," ACHA, Chicago: 1984.
- ¹⁹ H.L. Smith and N.F. Elbert, "An Integrated Approach to Performance Evaluation in the Health Care Field," Health Care Management Review 5, No. 1 (Winter 1980): 59.
- ²⁰ Ibid.
- ²¹ Ibid., 63.
- ²² Robert L. Taylor and Robert A. Zawacki, "Trends in Performance Appraisal: Guidelines for Managers," Personnel Administrator, March 1984, p. 80.
- ²³ Ibid., p. 76.
- ²⁴ Pajer, p. 89.
- ²⁵ Alvin Toffler, "Interview," Management 4, No. 2 (Spring 1983): 7.
- ²⁶ Ibid., 9.
- ²⁷ Robert G. Holloway, "Management Can Reverse Declining Work Attitudes," Hospitals 50, No. 19 (October 1976): 71.
- ²⁸ DeMarco and Nigro, 44.
- ²⁹ Ibid., 48.
- ³⁰ Ibid., 45.
- ³¹ Ibid.
- ³² DeMarco and Nigro, 50. The construct validity and split-half reliability of the FEAS items was established through an analysis done by OPM staff of the results of a 1979 survey of some 14,000 federal workers.
- ³³ Ibid., 44.
- ³⁴ Randall B. Dunham and Frank J. Smith, Organizational Surveys, (Glenview, IL: Scott, Foresman and Co., 1979), p. 68.
- ³⁵ DeMarco and Nigro, 45.
- ³⁶ Wayne W. Daniel, Biostatistics, (New York: John Wiley & Sons, 1978): p. 312.

II. DISCUSSION

Data Evaluation

This chapter will present and evaluate the data gathered from the GPAS survey. The results will focus on the assessment of the research question. Additional discussion will elaborate on the differences between responses based on position or rating received. The reliability and validity of the survey will be addressed. The discussion will conclude with an item analysis of the survey questions.

A scatter diagram (Figure 1) was produced from the GPAS rating received and the mean GPAS attitude score. The GPAS rating data is on an interval scale which accounts for the vertical clustering at X=3 or 4 or 5. The large number of data points (N=110) made it difficult to see individual locations, but the least square regression line can be examined. The scatter diagrams for the laboratory technologist (Figure 2) and Registered Nurse (Figure 3) samples are presented for further study.

The variables of GPAS rating and GPAS attitude were analyzed using a computer program.¹ The regression table includes a correlation coefficient which provides a single

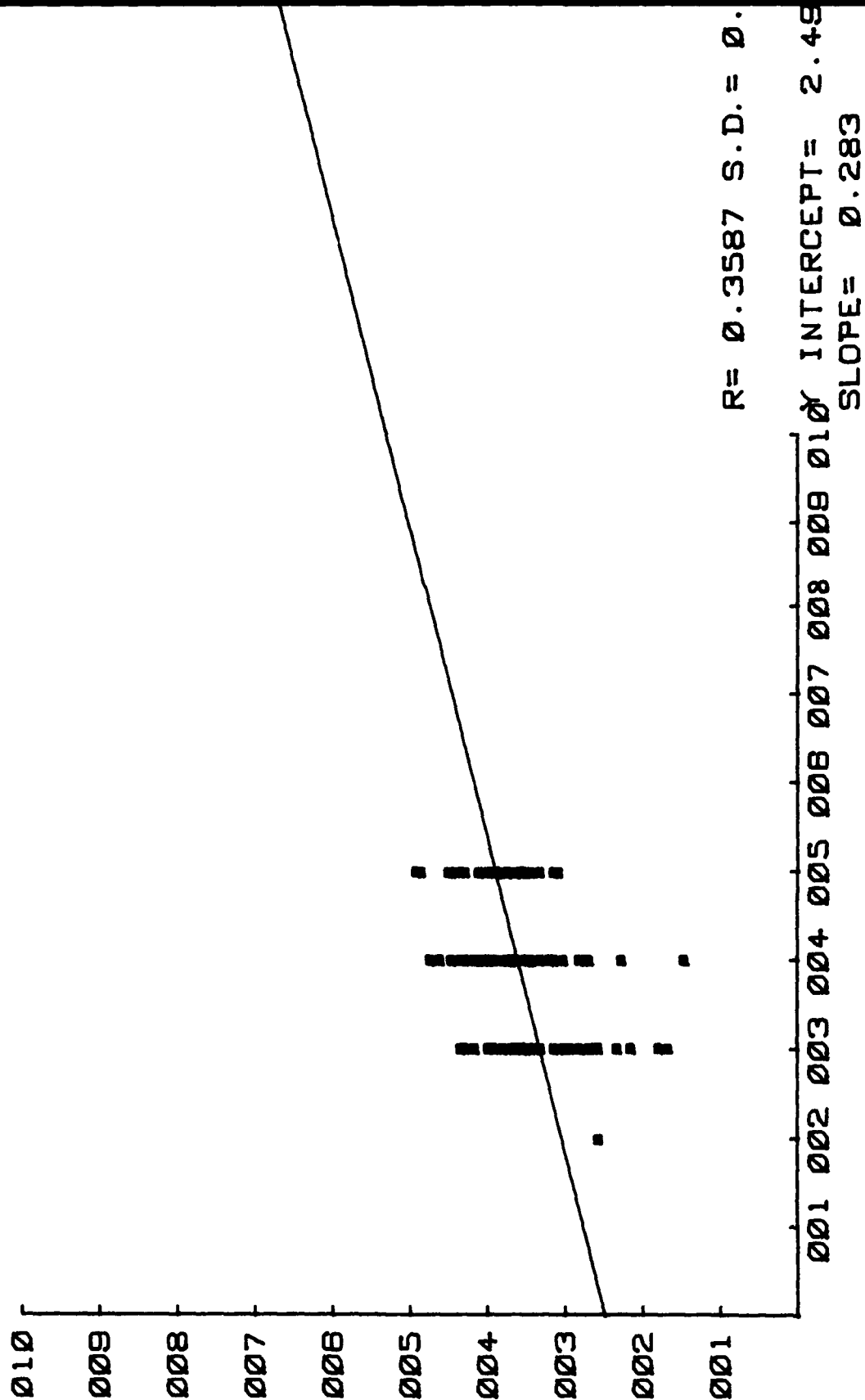


FIGURE 1
Correlation Scatter Diagram

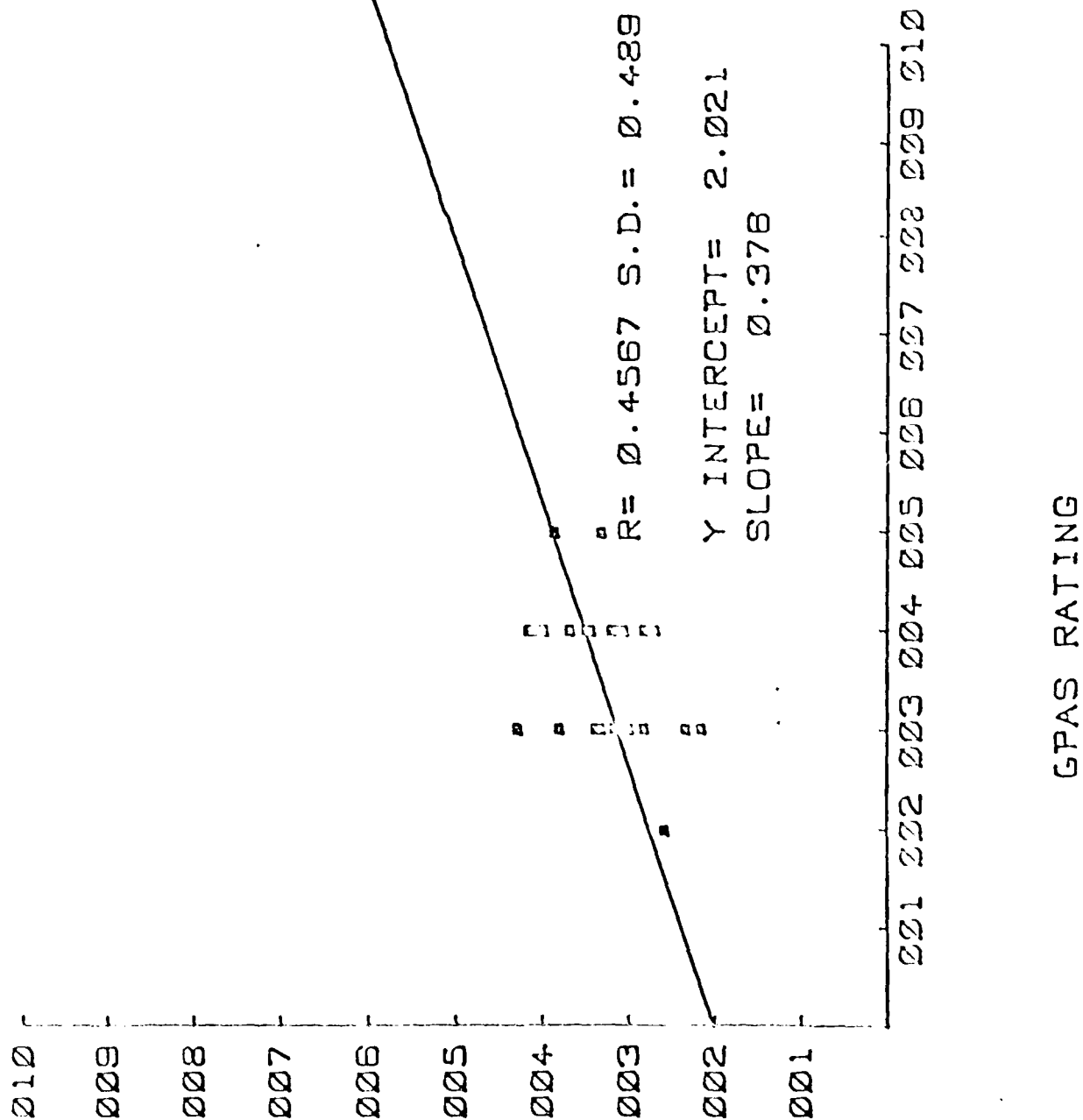


FIGURE 2
Correlation Scatter Diagram: Lab Technologist

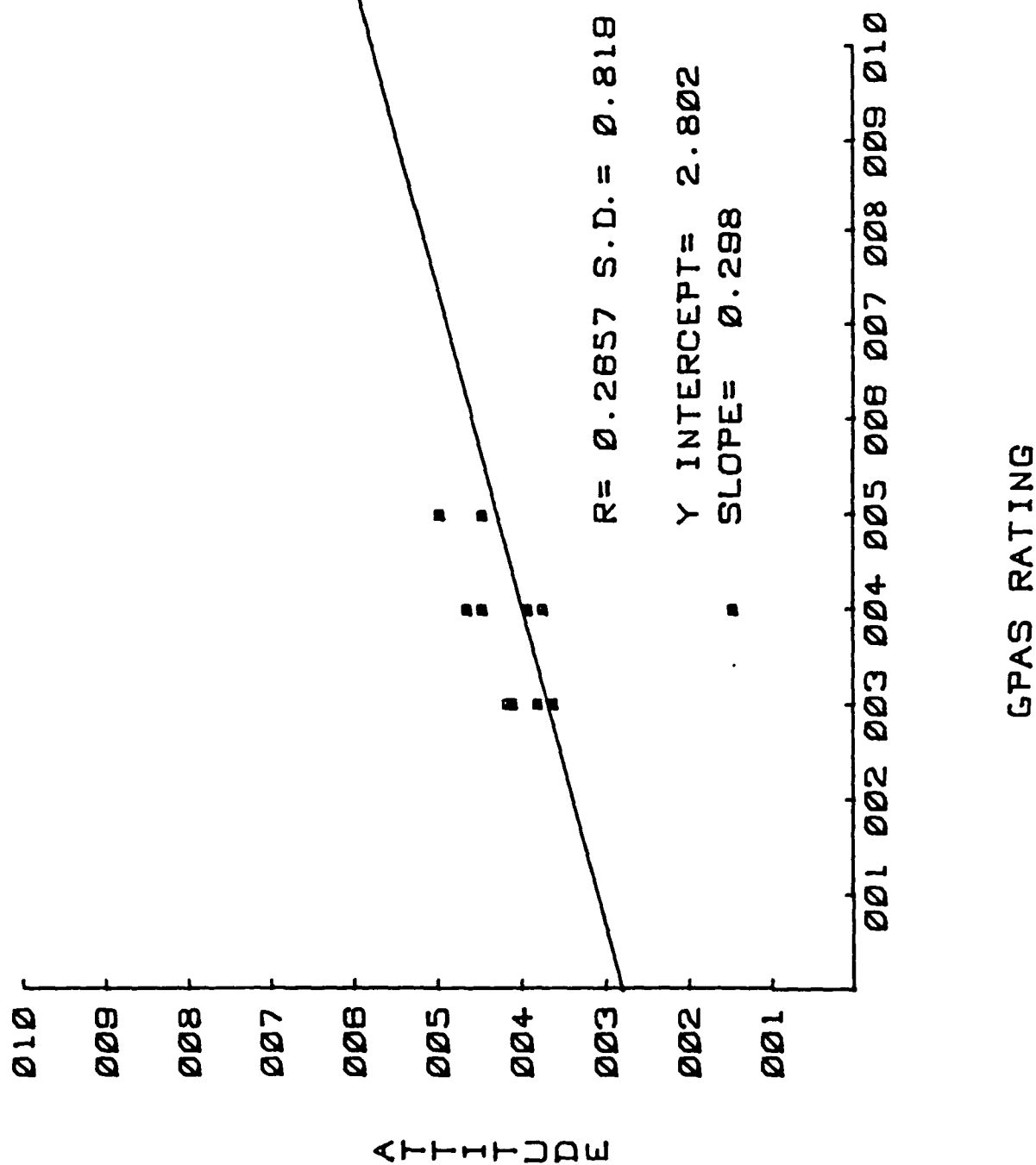


FIGURE 3
Correlation Scatter Diagram: Registered Nurses

number to summarize the relationship between the two variables (Table 1). The coefficient indicates the degree to which variation (or change) in one variable is related to variation (change) in another. The correlation coefficient is recorded on each of the three scatter diagrams.

An analysis of covariance was run by computer. The results (Table 1) are significant for the total sample. The large F ratio statistic (15.94) indicates that a significant difference exists between the means of the variables. The difference in GPAS attitude scores is affected by the type of rating received. The very low p value ($<.005$) notes the probability of rejecting the null hypothesis when it was actually true (type 1 error).

The results for the sample of lab technologists (N=31) also indicate a significant relation between GPAS attitude and GPAS rating. The regression table for the nurses does not indicate a statistically significant difference between the means of the variables. The small sample size (N=14) resulted from a poor return rate on the survey. The decentralized method used by the Department of Nursing Administrative Officer to control the surveys resulted in less than 35% return rate. This shortfall might have been eliminated if the Section Chief Nurses had been more directly involved in the survey administration.

REGRESSION TABLE-ALL SURVEYS

SOURCE	SUM OF SQ.	DEG.FREEDOM	MEAN SQ.
REGRESSION	5.570887716988	1	5.570887716988
RESIDUAL	37.71177986202	108	.3491831468706
TOTAL	43.282667579	109	

F=15.95405668033 p< 0.005

COEFF. OF DETERMINATION= .1287094356377

COEFF. OF CORRELATION= .35876097285

STANDARD ERROR OF ESTIMATE= .59091720814

REGRESSION TABLE-LAB TECHNOLOGIST

SOURCE	SUM OF SQ.	DEG.FREEDOM	MEAN SQ.
REGRESSION	1.962173091179	1	1.962173091179
RESIDUAL	7.442432969421	31	.2400784828845
TOTAL	9.4046060606	32	

F=8.173048528146 p< 0.01

COEFF. OF DETERMINATION= .2086395834696

COEFF. OF CORRELATION= .4567708216

STANDARD ERROR OF ESTIMATE= .48997804327

REGRESSION TABLE-REGISTERED NURSE

SOURCE	SUM OF SQ.	DEG.FREEDOM	MEAN SQ.
REGRESSION	.6120107142943	1	.6120107142943
RESIDUAL	8.056625000006	12	.6713854166672
TOTAL	8.6686357143	13	

F= .9115639081534 n.s.

COEFF. OF DETERMINATION= 7.06005805E-02

COEFF. OF CORRELATION= .26570769764

STANDARD ERROR OF ESTIMATE= .81938111808

TABLE 1

SURVEY DATA REGRESSION ANALYSIS

The nurse GPAS attitude mean is 3.91 compared to a laboratory technologist attitude mean of 3.37 (Table 2). This difference in means is significant ($p < .02$) and suggests the impact of supervisor rating behavior on GPAS attitude. No proportional relationships could be established among the GPAS ratings received between the departments.

The overall sample distribution of GPAS ratings was marginal (1), fully successful (39), highly successful (42), and exceptional (28). The distribution of ratings is clearly skewed toward higher evaluations.

Non-standard responses were noted in 10% of the surveys analyzed. Although they were not included in the statistical analysis, they can be interpreted on a case-by-case basis. The number of employees (13) who had no knowledge of GPAS or who had not yet been appraised indicates a problem in orientation and training. This shortfall may be more prevalent in blue collar positions where increased turnover and greater employee to supervisor ratios exist.

LAB TECH

1 2.58
 2 3.35
 3 2.18
 4 2.35
 5 3
 6 3.12
 7 3.06
 8 3.41
 9 3.18
 10 2.82
 11 3
 12 3.82
 13 4.29
 14 3.18
 15 2.82
 16 3.71
 17 4
 18 4.12
 19 3.71
 20 3.71
 21 4
 22 3.53
 23 3.47
 24 3.47
 25 4.06
 26 4.18
 27 2.7
 28 4
 29 3.06
 30 3.12
 31 3.23
 32 3.35
 33 3.88
 MEAN= 3.3775757576
 S.D.= .54211985704
 S.E.=9.43709539E-02
 T= 2.644615339773

NURSE

1 3.65
 2 4.18
 3 3.65
 4 3.65
 5 3.82
 6 4.12
 7 4.65
 8 3.76
 9 3.94
 10 4.47
 11 1.47
 12 3.94
 13 5
 14 4.47
 MEAN= 3.912142857143
 S.D.= .81658932878
 S.E.= .2182426781407

DEGREES OF FREEDOM=45

TABLE 2

GPAS Attitude Means of Nurse and Lab Technologist Samples

Survey Reliability and Validity

The reliability of any survey is its capacity to measure with a relative absence of error. A reliable survey will tend to produce similar results over time. The mean GPAS attitude score for the pilot survey was similar to the main survey. The reliability of this survey was increased by: (1) the use of clear questions, (2) the large number of related questions, and (3) the standardization of instructions and uniform administration of the survey.² The appropriate language level enhanced respondent understanding and the choice of five possible responses provided clear options for indicating attitude. The wide deviation (1.47 to 4.53) in mean scores reflects this difference in GPAS attitude.

The validity of the survey is the power of the instrument to measure what it is intended to measure. The primary method to increase validity is to insure that each question is appropriate. The GPAS survey results compared closely with the OPM survey findings in four related questions on employee attitude toward PA personnel policies (Appendix A).

Survey Item Analysis

An item analysis of the GPAS survey was conducted to identify those questions that had scores with 25% or more negative responses (Table 3). The sample was divided into three subgroups according to GPAS rating. The five response levels were combined into positive and negative categories as discussed in the research methodology.

Three questions were highlighted that met the standard for all three subgroups of respondents. A negative attitude was indicated concerning the ability of GPAS to remove poor performers or reward deserving employees. Employees surveyed also felt that they did not receive enough training to understand the GPAS system. The relation between these attitudes and their impact on the validity of GPAS as perceived by the surveyed workers will be discussed in the research conclusion.

The presentation of survey data has addressed the basic research question. Variations in response depending on position or rating received have indicated differences between subgroups. The ability of the instrument to identify perceived shortfalls in GPAS at TAMC has been noted through item analysis. The utility of the data obtained via this survey represents "circumstantial evidence" about GPAS attitudes at TAMC that link to objective conditions and behaviors that were not measured directly.³

File: SURVEY ITEM ANALYSIS

Report: GPAS DISCUSSION

Page 1

25JUNE 1984

QUESTION POSITIVE NEGATIVE POSITIVE NEGATIVE POSITIVE NEGATIVE

	Fully Successful		Highly Successful		Exceptional	
1	35*	28	55	21	60	18
2	53	18	79	7	90	0
3	18	38	21	29	21	36
4	70	18	88	5	100	0
5	75	15	88	5	100	0
6	50	33	64	26	64	29
7	43	8	69	7	75	11
9	20	48	40	36	46	32
10	60	20	71	17	93	4
11	68	10	83	17	96	0
12	83	5	90	7	100	0
13	53	15	72	12	89	7
14	48	25	57	24	64	11
15	55	33	74	17	82	11
16	58	25	76	12	93	0
17	75	4	83	7	89	0

* all data are percentages

TABLE 3
Survey Data Item Analysis

FOOTNOTES

¹Computer support provided by Department of Clinical Investigation, Tripler Army Medical Center.

²Dunham and Smith, p. 76.

³DeMarco and Nigro, p. 44.

III. CONCLUSIONS AND RECOMMENDATIONS

Conclusions

An analysis of GPAS attitude survey data from a sample of health care workers at Tripler Army Medical Center has determined that a positive relation exists between employee GPAS attitude and performance rating level. The workers who had exceptional evaluations had more positive attitudes toward the GPAS than those employees who received lower ratings.

The supervisor evaluates the employee and assigns a performance rating. How accurately the worker perceives this evaluation is influenced by factors such as supervisor, peers, task, and self. The most important characteristic in terms of its impact on the acceptance of feedback is the sign of the rating.¹ Positive ratings are harmonious with most individuals self-images and, therefore, are easily accepted.² These research findings are in agreement with this premise and reinforce the linkages between attitudes, perceptions, and job performance that have been noted to exist in many instances.³ The relation between GPAS attitude and GPAS rating is involved, however, it seems reasonable to conclude that the situation at TAMC is not an exception to previous research.

If GPAS is to be evaluated against the CSRA goals that it was designed to achieve, it is logical to attempt to isolate the conditions that facilitate effectiveness. Three questions identified in the item analysis of the survey point to areas of negative response greater than 25% regardless of rating received.

Employee participation in the setting of standards and worker training to understand the GPAS were noted as negative response areas. When employees were involved in the process they perceived that they were fairly and accurately rated.⁴ Survey results indicated that more joint effort and training was needed in implementing GPAS. These findings were compatible with the research results of DeMarco and Nigro. Their 1982 survey of laboratory workers found that 31% of respondents did not believe that performance standards were being set participatively.⁵ Additionally, the results verify the 1983 OPM survey finding that noted a negative response to the question on joint discussion of performance standards.

At the heart of the appraisal process is a communicating spirit between managers and employees. The joint standard-setting aspect of GPAS is an ideal format to enhance work related communication. The specific agreement to accomplish certain results is the desired outcome of this shared responsibility.

The instrumentality of GPAS in relation to rewards and removals received >25% negative response in two survey questions. Employees who do not see outstanding work rewarded can not be expected to believe that poor performance will have consequences or that their work will receive recognition.⁶ The attitude survey pointed to a perception that GPAS and tangible outcomes were not strongly linked.

The positive attitude scores found in the majority of the questions indicate that the workforce considers GPAS a valid system. This finding supports the belief that a collaborative PA system is preferred by health care workers with a high need for achievement and development. Under this perception, the employees may be more likely to accept the particular evaluations they receive.⁷ As the system is fine tuned, increasing emphasis must be placed on both the immediate results (Was top performance rewarded?) and the long term impact (Did rewards motivate workers to increased effectiveness and greater productivity?).⁸ GPAS implementation at TAMC has required considerable effort, and improving the system will take more effort. An understanding of employee perceptions about the effectiveness of the system will help guide modification.

Questionnaire surveys have weaknesses and limitations particularly when based on a single sampling of employee attitude. However, they are a reasonably inexpensive, administratively convenient way to collect a great deal of usable information about an organization and its members.

Recommendations proposed in the next section based on this survey will suggest courses of action that may further improve the effectiveness of GPAS. The recommendations are primarily focused at TAMC, but there is some general applicability to the entire federal workforce.

Recommendations

The CSRA mandated performance appraisal system created a challenge for federal managers. Six years have passed since the enactment of the legislation, and the system evolution is far from complete.⁹ The problems found in the federal system are not peculiar to government. Managers in all fields are attempting to achieve the perfect system. Often this results in mixed messages being sent to the employee as the leadership tests out various types of PA systems.

It is not the intention of this research to propose any sweeping changes to GPAS. The literature review and applied survey results both point to the positive aspects of the system. Employee perceptions and attitudes toward

GPAS at TAMC indicate areas that need attention. These recommendations will be divided between CPOH and the TAMC leadership and addressed separately.

CPOH has the local responsibility for GPAS and the major role in insuring employees and managers implement the system. These efforts have been successful as perceived by the attitudes measured in this survey. CPOH will be provided with this study to assist in understanding TAMC employee attitudes toward GPAS.

It is recommended that CPOH establish a quality assurance program for the GPAS. The program could begin by promoting and conducting training that is centered on a set of key principles.¹⁰ The focus would be on addressing the perceived problem areas of lack of joint participation and lack of performance instrumentality. Training should be aimed at the first line supervisor (GS-7 and above). The supervisory role is the vital link between administrative intent and organizational outcome.¹¹ Supervisors must learn the needed appraisal skills, solve problems arising from GPAS, and demonstrate commitment and energy to make GPAS work.

It is recommended that TAMC review any organizational policies that may inhibit GPAS effectiveness. Employee recognition should receive publicity to underscore the relation between performance and reward. TAMC has an ongoing program in this area, and the role of GPAS could

be emphasized. TAMC leadership should continue to work closely with CPOH to monitor GPAS incentives and insure that communication about its role in linking performance and pay is widely understood by the workforce.

Further monitoring of GPAS employee attitudes is suggested. An extension of this attitude survey would be an analysis between GPAS attitude and behaviors such as turnover, absenteeism, and commitment. The survey method can be supplemented by interview and record audit. The individual survey responses will be provided to CPOH to review some of the written comments that were found on several surveys. Of particular concern are those surveys returned because the employee had no knowledge of GPAS.

Barring an unexpected retreat from the CSRA, its requirements regarding performance appraisal will continue to have a strong impact on federal personnel management. The perceptions and attitudes of the workforce can be a means of estimating how well GPAS is being implemented through the supervisory chain. The approach to design the optimal PA system for the federal workforce can be enhanced through an understanding of employee attitudes toward how their performance is evaluated and rewarded.

FOOTNOTES

¹ Frank J. Landy and James L. Farr, The Measurement of Work Performance (New York: Academic Press, 1983), 168.

² Ibid.

³ DeMarco and Nigro, 45.

⁴ Toffler, p. 7.

⁵ DeMarco and Nigro, 48.

⁶ Toffler, p. 7.

⁷ Frank Landy, Sheldon Zedeck, and Jeanette Cleveland, Performance Measurement and Theory (Hilldale, NJ: Lawrence Erlbaum Associates, 1983), p. 77.

⁸ Toffler, p. 7.

⁹ Ibid., p. 6.

¹⁰ Pajer, 88.

¹¹ DeMarco and Nigro, 43.

APPENDIX A

Office of Personnel Management Survey Results

2011/01/11

604008

INTERFERENCE

[illegible]

QUESTIONS

AVG RATIO

INTERPRETATION

46. BY WORK ASSIGNMENTS ARE WELL PLANNED	0.51	00	TEST PERFORMED - DISSAT. NOT INDICATED
47. AGENCY USES PEOPLE EFFICIENTLY AND EFFECTIVELY	0.49	00	TEST PERFORMED - DISSAT. NOT INDICATED
48. I AM ABLE TO QUESTION PROMOTION ACTIONS	0.51	00	TEST PERFORMED - DISSAT. NOT INDICATED
49. ARE THE PRIORITIES TREATED VS. NON-PRIORITIES	0.50	00	TEST PERFORMED - DISSAT. NOT INDICATED
50. ARE THE PRIORITIES TREATED VS. NON-PRIORITIES	0.50	00	TEST PERFORMED - DISSAT. NOT INDICATED
51. ARE THE PRIORITIES TREATED VS. NON-PRIORITIES	0.50	00	TEST PERFORMED - DISSAT. NOT INDICATED
52. ARE THE PRIORITIES TREATED VS. NON-PRIORITIES	0.50	00	TEST PERFORMED - DISSAT. NOT INDICATED
53. ARE THE PRIORITIES TREATED VS. NON-PRIORITIES	0.50	00	TEST PERFORMED - DISSAT. NOT INDICATED
54. ARE THE PRIORITIES TREATED VS. NON-PRIORITIES	0.50	00	TEST PERFORMED - DISSAT. NOT INDICATED
55. ARE THE PRIORITIES TREATED VS. NON-PRIORITIES	0.50	00	TEST PERFORMED - DISSAT. NOT INDICATED
56. ARE THE PRIORITIES TREATED VS. NON-PRIORITIES	0.50	00	TEST PERFORMED - DISSAT. NOT INDICATED
57. ARE THE PRIORITIES TREATED VS. NON-PRIORITIES	0.50	00	TEST PERFORMED - DISSAT. NOT INDICATED
58. ARE THE PRIORITIES TREATED VS. NON-PRIORITIES	0.50	00	TEST PERFORMED - DISSAT. NOT INDICATED
59. ARE THE PRIORITIES TREATED VS. NON-PRIORITIES	0.50	00	TEST PERFORMED - DISSAT. NOT INDICATED
60. ARE THE PRIORITIES TREATED VS. NON-PRIORITIES	0.50	00	TEST PERFORMED - DISSAT. NOT INDICATED
61. ARE THE PRIORITIES TREATED VS. NON-PRIORITIES	0.50	00	TEST PERFORMED - DISSAT. NOT INDICATED
62. ARE THE PRIORITIES TREATED VS. NON-PRIORITIES	0.50	00	TEST PERFORMED - DISSAT. NOT INDICATED
63. ARE THE PRIORITIES TREATED VS. NON-PRIORITIES	0.50	00	TEST PERFORMED - DISSAT. NOT INDICATED
64. ARE THE PRIORITIES TREATED VS. NON-PRIORITIES	0.50	00	TEST PERFORMED - DISSAT. NOT INDICATED
65. ARE THE PRIORITIES TREATED VS. NON-PRIORITIES	0.50	00	TEST PERFORMED - DISSAT. NOT INDICATED
66. ARE THE PRIORITIES TREATED VS. NON-PRIORITIES	0.50	00	TEST PERFORMED - DISSAT. NOT INDICATED
67. ARE THE PRIORITIES TREATED VS. NON-PRIORITIES	0.50	00	TEST PERFORMED - DISSAT. NOT INDICATED
68. ARE THE PRIORITIES TREATED VS. NON-PRIORITIES	0.50	00	TEST PERFORMED - DISSAT. NOT INDICATED
69. ARE THE PRIORITIES TREATED VS. NON-PRIORITIES	0.50	00	TEST PERFORMED - DISSAT. NOT INDICATED
70. ARE THE PRIORITIES TREATED VS. NON-PRIORITIES	0.50	00	TEST PERFORMED - DISSAT. NOT INDICATED
71. ARE THE PRIORITIES TREATED VS. NON-PRIORITIES	0.50	00	TEST PERFORMED - DISSAT. NOT INDICATED
72. ARE THE PRIORITIES TREATED VS. NON-PRIORITIES	0.50	00	TEST PERFORMED - DISSAT. NOT INDICATED
73. ARE THE PRIORITIES TREATED VS. NON-PRIORITIES	0.50	00	TEST PERFORMED - DISSAT. NOT INDICATED
74. ARE THE PRIORITIES TREATED VS. NON-PRIORITIES	0.50	00	TEST PERFORMED - DISSAT. NOT INDICATED
75. ARE THE PRIORITIES TREATED VS. NON-PRIORITIES	0.50	00	TEST PERFORMED - DISSAT. NOT INDICATED
76. ARE THE PRIORITIES TREATED VS. NON-PRIORITIES	0.50	00	TEST PERFORMED - DISSAT. NOT INDICATED
77. ARE THE PRIORITIES TREATED VS. NON-PRIORITIES	0.50	00	TEST PERFORMED - DISSAT. NOT INDICATED

APPENDIX B

General Performance Appraisal System Attitude Survey

GPAS QUESTIONNAIRE

The General Performance Appraisal System (GPAS) is designed to provide you with an evaluation of your work efforts and to encourage you to participate in setting standards. This survey will measure your attitudes and opinions about GPAS on a five point scale. The results will be used in my research project. A big MAHALO for your time. Cpt. Johnson Admin Resident 433-6633.

Your response to the statement is---

1. Strongly Disagree
2. Disagree
3. Neutral-Don't Know
4. Agree
5. Strongly Agree

1. The new appraisal system encourages productivity. 1 2 3 4 5

2. The new appraisal system (with required critical elements and performance standards) is an improvement over the old system. 1 2 3 4 5

3. More removals for poor performance will result from the new system. 1 2 3 4 5

4. I agree with the critical elements identified for my position. 1 2 3 4 5

5. I agree with the performance standards for my job. 1 2 3 4 5

6. I received enough training to understand the new appraisal system. 1 2 3 4 5

7. My supervisor understands the new appraisal system. 1 2 3 4 5

8. The new system will help me better understand what is expected of me and how well I am performing. 1 2 3 4 5

- | | Strongly Disagree | Disagree | Neutral-Don't Know | Agree | Strongly Agree |
|--|-------------------|----------|--------------------|-------|----------------|
| 9. Only the most deserving will get awards under the new system. | 1 | 2 | 3 | 4 | 5 |
| 10. My critical elements are the most important part of my job. | 1 | 2 | 3 | 4 | 5 |
| 11. My performance standards are related to the goals of this organization. | 1 | 2 | 3 | 4 | 5 |
| 12. Successful performance of my critical elements will contribute to our mission. | 1 | 2 | 3 | 4 | 5 |
| 13. Successful accomplishment of my performance standards will make me a more productive employee. | 1 | 2 | 3 | 4 | 5 |
| 14. Performance standards are necessary to increase productivity. | 1 | 2 | 3 | 4 | 5 |
| 15. I get feedback on how I'm doing from my boss. | 1 | 2 | 3 | 4 | 5 |
| 16. I have ample chances to find out how I'm doing on my job. | 1 | 2 | 3 | 4 | 5 |
| 17. I have that inner feeling whether I'm performing my job well or poorly. | 1 | 2 | 3 | 4 | 5 |
| My last appraisal was : | | | | | |
| <input type="checkbox"/> | Unsatisfactory | | | | |
| <input type="checkbox"/> | Marginal | | | | |
| <input type="checkbox"/> | Fully Successful | | | | |
| <input type="checkbox"/> | Highly Successful | | | | |
| <input type="checkbox"/> | Exceptional | | | | |

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