# PROJECT DEMONSTRATING EXELLENCE

"An Examination Of The Relationship Between Employee Turnover And Job Satisfaction At Kirby Forensic Psychiatric Center, New York City"

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for the degree of Doctor of Philosophy in Interdisciplinary Studies with a concentration in Organizational Development

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## **Project Demonstrating Excellence**

"An Examination Of The Relationship Between Employee Turnover And Job Satisfaction At Kirby Forensic Psychiatric Center, New York City"

#### Abstract

This study was conducted to address the problems of job satisfaction and employee turnover at Kirby Forensic Psychiatric Center (KFPC) in New York City. Based on the institutional records, it is generally understood that a staff tenure problem exists at KFPC. With this realization, this study sought to narrow the focus of the employee turnover problem at KFPC by using an employee job satisfaction questionnaire as a tool to answer the following questions: (1) "Is there a measurable pattern of job satisfaction that corresponds with employee turnover at Kirby Forensic Psychiatric Center?" and (2) "Does this pattern indicate that employees who are less satisfied with certain aspects of their jobs are more likely to leave the institution?" Also included in this study was an action plan for workplace improvement at KFPC.

The two groups of participants in this study included current employees at KFPC in 1999 and former staff members who terminated their employment during the year of 1999. Similarities and differences between the two participant groups on various aspects of job satisfaction were determined. T-tests were used to determine differences in means of the two participant groups.

The research findings showed that the former employees expressed greater dissatisfaction than the current employees with regard to the following aspects: (1) opportunities for advancement, (2) their immediate supervisor, (3) the notion that hard work is rewarded and appreciated and (4) the level of acceptance within the organization concerning people from diverse cultural backgrounds. Additionally, there were some seeming anomalies in the findings. The former employees were more satisfied than the current employees with the following aspects: (1) access to needed training, (2) the adequacy of employee orientation and (3) the clarity of rules and regulations at KFPC.

By integrating the findings, it is fair to conclude that there is a pattern of correlation between job satisfaction and employee turnover at KFPC. When individuals are dissatisfied with regard to their supervisors and frustrated by a perception that there is a low level of acceptance of their cultural background throughout the entire institution at KFPC, they begin to search for alternative employment elsewhere. If simultaneously, they enjoy opportunities to access various training programs to strengthen their skills and knowledge, and through experience or knowledge they arrive at an understanding that the institutional rules and regulations will not favorably affect their chances of reward and promotion, they are most likely to have a successful job search and leave KFPC for a better opportunity elsewhere.

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### **CHAPTER 1**

## INTRODUCTION AND RESEARCH PROBLEM

### Introduction

Many moral, economic and legal developments have combined to cause a sharper focus on employee job satisfaction. One of the most influential forces has been the movement of organizations toward lean operations (i.e. the quest to produce more and better quality output with fewer resources). This trend has made "downsizing" a constant concern of all types of work organizations. The movement toward lean operations has major consequences for both employees who leave the organization and for those who stay. Those who leave will face the many difficulties associated with unemployment, job search and perhaps relocation. Those who stay will be asked to contribute more, as there will be fewer co-workers to assist with more diverse and difficult tasks. As each employee is asked to contribute more for the same pay, job satisfaction will become even more important for both the individuals and the organization. In addition, organizations have the moral responsibility to treat their employees well. Thus, the combined effect of moral, economic and legal issues has made employee job satisfaction a central concern in the everyday life of work organizations.

Scholars agree that organizations have many and diverse effects on the lives of people who work in them. Some of these effects are reflected in how people feel about their work. Negative feelings can be detrimental to the organization's performance and survival and potentially averse to employee physical and psychological well-being. Organizations can do much to enhance employee well-being. Organizational practices that maximize job satisfaction will likely motivate employees to be more productive and cooperative in contributing to the efficiency and effectiveness of the organization. Therefore, continuous attention to employee job satisfaction is imperative for the continued success of work organizations.

Several theories point out that employee job satisfaction is causally related to employee turnover (Mobley, Griffeth, Hand, and Meglino, 1994; Bluedom, 1996). In these theories, it is postulated that people who do not like their jobs will try to find alternative employment, and studies have been reasonably consistent in showing a correlation between job satisfaction and employee turnover (Crampton and Wagner, 1999). Further, a causal relationship has been demonstrated between job dissatisfaction and employee turnover (Spector, 2000). Longitudinal designs have been typically applied in the research studies related to job dissatisfaction which leads to employee turnover. Using the longitudinal design, job satisfaction is measured in a sample of employees at one point in time. At a later time, the researcher determines who has quit, and then compares job satisfaction levels of those who quit with those who did not. From such a design,

it is likely that causality runs from job dissatisfaction to turnover rather than the reverse, because the behavior (i.e. turnover) did not occur until months or years after the job satisfaction assessment. According to Mobley (1997), a greater use of longitudinal research rather than a "snapshot" approach is an ongoing need in employee turnover research.

The causes and correlates of employee turnover have been studied from many different perspectives (Kraut, 1990; Armknecht and Early, 1992; Price, 1992; Hulin, 1993; Mobley, Hornor, and Hollinsworth, 1993; Mowday, Streers, and Porter, 1994; Walker, 1995). Each of these perspectives offers a contribution to a better understanding of employee turnover. However, several caveats must be carefully noted (Mobley, 1997).

First, many studies of employee turnover have been based on aggregate data from groups. Thus, the variables in the relationship between employee turnover rates and group satisfaction have been studied through the related factors of employee turnover. For example, one could compare employee turnover rates by level of unemployment in the economy, by occupational groups, or by average job satisfaction within departments. Therefore, in human resource planning, analysis of the variables within the job satisfaction-turnover relationship may permit a researcher to forecast the employee turnover rates among the various employee groups. Knowing that job dissatisfaction causes employee turnover may be useful in projecting the number of employees who are likely to leave and

the number of required replacements in certain groups of employees. However, it is important to note that *group* analysis does not permit prediction or understanding of which *individual* will leave or stay. Thus, predicting employee turnover requires individual as well as group analyses.

Second, many studies of employee turnover focus on analyzing one or two variables in isolation. There are many potential causes of employee turnover which may be interrelated. Thus, analysis of individual variables in isolation precludes any statement of the importance of relationships between variables within a wider set of variables. Therefore, studies that concurrently assess multiple determinants of employee turnover, such as multivariate analyses, are particularly useful.

Third, some studies of employee turnover are retrospective in that they seek the causes of employee turnover after it has occurred. For example, exit interviews may be useful to elicit the reasons for employee turnover. The interviews can be useful sources of diagnostic information (Lefkowitz and Katz, 1989). However, retrospective exit interview analyses are not substitutes for predictive analyses. With predictive analyses, variables thought to be related to employee turnover are measured in advance and their relationship to subsequent employee turnover is assessed.

The final caveat concerns the measurement of change and its relationship to

employee turnover. Many important determinants of employee turnover are in a constant state of change. Thus, in the analysis of the determinants of employee turnover, researchers need to isolate the change and relate it to turnover. There are few studies which have attempted to focus on the dynamic nature of the employee turnover process via longitudinal analysis (Graen, 1991). Even fewer studies have used a field experimental design to better understand change and its impact on employee turnover (Hulin, 1994; Wanous, 1995). The periodic, readministering of the survey instrument can also be useful in analysis of change and trends in employee behavior over time.

An important conclusion of the research on job satisfaction and labor turnover is that the relationship between job satisfaction and turnover is not particularly strong, yet consistent (Price, 1992; Mobley, Griffeth, Hand, and Meglino, 1994). Anastasi (1999) has argued that in theory, improving job satisfaction will reduce employee turnover, and Mobley (1997) has shown that dissatisfied employees are more likely to leave the organization than satisfied ones.

Hence, even though the relationship between job satisfaction and employee turnover is not particularly strong, job satisfaction can be measured as an important correlate of employee job turnover. Measuring job satisfaction can be integrated with other measures of employee behavior and work conditions to effectively predict and better understand employee turnover. The employee attitude and job satisfaction survey is the most commonly used method of

measuring various aspects of employee well-being and its relationship to job tenure. Surveys can be useful diagnostic tools if they are well designed and professionally conducted. Ideally, surveys must be conducted under conditions where employees feel safe in giving candid responses on the survey instrument.

Another potentially useful technique used by many organizations to compliment job satisfaction surveys is providing feedback to the participants in the survey. Survey feedback has even been demonstrated to be effective in enhancing the job satisfaction of participants (Dunham and Smith, 1999). To further enhance the outcome of job satisfaction surveys, the surveyor or research team should be careful about undertaking diagnostic activities without their commitment to use the results to make positive changes. The job satisfaction survey itself is likely to raise expectations that management is concerned about employees' well-being. Lack of positive action following a survey can be extremely frustrating to those who took the time to share their concerns about the organization (Spector, 2000). On the other hand, a well-designed, properly conducted job satisfaction survey, followed by reasonable interventions to improve the work life of employees, can have tremendous payoffs for both the organization and the employees.

There are several varied dimensions of employee satisfaction which can be measured using the survey method. These dimensions may include employee satisfaction with working conditions, pay and benefit, job content, supervisors, and coworkers. A number of standardized survey instruments are currently

available for measuring these and other related dimensions of employee job satisfaction. These instruments include (1) The Job in General Scale (JIG) (Ironson, et. al., 1999); (2) The Job Satisfaction Survey (JSS) (Spector, 2000); (3) The Job Descriptive Index (JDI) (Smith, Kendall, and Hulin, 1994); and (4) The Minnesota Satisfaction Questionnaire (Weiss, et. al., 1992). The Job Diagnostic Survey (JDS) (Hackman and Oldham, 1991) is a particularly useful instrument for measuring employee perceptions of the content of their jobs. This standardized instrument assesses task variety, task significance, task identity, autonomy, and feedback, as well as several individual differences and satisfaction variables.

Job satisfaction or dissatisfaction is an attitudinal variable that can be a diagnostic indicator of how a person is doing in one of the major domains of his or her life. Many organizational conditions can lead to poor job attitudes and, thus, job dissatisfaction. Job dissatisfaction suggests that a problem exists either in the job, the work environment or within the person. Also, sometimes events and factors outside of work can have negative effects on job satisfaction. Regardless of its source, this attitudinal variable can have both positive and negative consequences ranging from high quality employee performance and organizational commitment to employee violence on the job and high levels of employee turnover. The relationship between employee job satisfaction and turnover is the focus of this study.

#### The Research Problem

Many organizations conduct periodic job satisfaction surveys, using external consultants or their own in-house resources, to diagnose current employee behavior as well as to predict future employee behavior. Since employee behavior as correlates of job satisfaction is idiosyncratic to each organization and because of the constancy of organizational change, the effectiveness of the survey may vary within the same organization and across similar organizations over time. Thus, it is necessary for each individual organization to periodically assess the effectiveness of its employee job satisfaction survey instrument to validate its efficacy as a tool for diagnosing and/or predicting employee behavior.

Therefore, this study was a comparative analysis of job satisfaction of current and former employees as a basis for better understanding and improving employee turnover at Kirby Forensic Psychiatric Center (KFPC) in New York City in 1999. Also included in this study was an action plan for workplace improvement at KFPC. The research sought to answer the questions: (1) "Is there a measurable pattern of job satisfaction that corresponds with employee turnover at Kirby Forensic Psychiatric Center?" and (2) "Does this pattern indicate that employees who are less satisfied with certain aspects of their jobs are more likely to leave the institution?"

The Kirby Forensic Psychiatric Center (KFPC) is one of the maximum-security psychiatric hospitals in the State of New York. It was established in 1985 to serve and isolate patients requiring forensic evaluations and care under maximum-security conditions in the New York City metropolitan area.

It can be speculated that there are many factors that potentially contribute to employee turnover in this type of setting. Furthermore, a review of the personnel records showed that KFPC particularly had the worst staff tenure in 1997 and 1998 compared to other comparable mental health institutions in the Sate of New York. For instance, the staff turnover rate of 36% at KFPC in 1998 (Kirby Forensic Psychiatric Center Annual Report, 1999) was much higher than the average of 25% among the other twenty-nine comparable institutions in the State of New York (New York State Office of Mental Health Annual Report, 1998) and the average of 22% among the entire state offices in the State of New York (New York State Statistical Yearbook, 1999). Because the turnover problems at KFPC were significant, it became a valuable setting in which to conduct the study.

## The purpose of the study

Although it is widely assumed at Kirby Forensic Psychiatric Center (KFPC) that there is an inverse relationship between employee adverse behavior and job satisfaction, to date there has been no empirical evidence to confirm this

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assumption. Therefore, the purpose of this study was to provide empirical

evidence to document the relationship (or lack thereof) between job

satisfaction and employee turnover at KFPC in New York City in order to

assist the institution in dealing more effectively with employee work behavior.

The scope of the study

This study included one mental health facility in the City of New York - Kirby

Forensic Psychiatric Center (KFPC). The participants in this study included

two groups of people at KFPC. The first group included the entire staff of 324

employees at all levels and departments at KFPC in 1999. The second group

included 117 former employees who terminated their employment with KFPC

at various levels and positions within the calendar year of 1999.

The significance of the study

Research in the past decade has documented several changes in working

conditions that have influenced employee turnover rates. These changes

have included an increased emphasis on cognitive skills accompanied by a

decreased emphasis on manual skills, added environmental uncertainty in the

workplace and an increase in competition as well as an expansion of diversity

among the workforce (Moore, 1998). The causes and correlates of employee

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turnover have been considered in substantial detail from a wide range of perspectives. Economic variables have been studied; organizational variables have been considered; and individual characteristics have been explored.

In particular, the concept of job satisfaction has been analyzed in great detail and researchers have evaluated how employee job satisfaction has related to the significant issue of employee turnover rates. Job satisfaction has been approached as an attitude; researchers have considered job satisfaction as the extent to which people like, that is, are satisfied with their jobs, or dislike, that is, are dissatisfied with their jobs.

Theoretically, job satisfaction has been approached from a needs-fulfillment perspective. That is, the question to be answered from this perspective is as follows: How well does the job meet the employee's physical and psychological needs in terms of such work-related variables as pay and job advancement? (Herring, 1985; Wolf, 1995). However, with the increased focus on cognitive skills in the workplace and a reduction in manual skill emphasis, in recent years, this needs-fulfillment perspective has been less central in research on the relationship between job satisfaction and employee turnover. Rather, the perspective of job satisfaction as an attitude has become the dominant approach used in current research on job satisfaction and employee turnover; thus, shifting responsibility for job satisfaction from the employer organization to the employee.

Using the attitudinal approach, a number of studies have addressed the relationship between employee job satisfaction and employee retention issues. The findings have demonstrated significant variations in terms of both positive and negative relationships between the same or similar variables tested. With these variations, researchers have appealed to attitudinal theory of job satisfaction (Huff, 2000).

As the results of this study are integrated with findings of other related studies for theory building and decision making, a valuable contribution can be made to the professional literature in human resource management in general and to human resource managers/practitioners in mental health institutions in particular. Personnel decisions based on the results of empirical research not only benefit human resource managers, but can greatly improve the work environment and, thus, the quality of life for both the mental health operative personnel and the psychological patients as well. To the extent that the results of this study are used to make the necessary institutional changes at Kirby Forensic Psychiatric Center (KFPC) to improve the quality of work life for its employees, care for the psychologically ill will also be greatly enhanced; as the unique health needs of the psychologically ill are most likely to suffer with a constant flux of caregivers. In addition, as KFPC becomes a more cost-effective state institution, society in general and tax payers in particular will be the benefactors.

Further, this study has provided opportunity to enhance my knowledge and skills in personnel management in general and in employee satisfaction and turnover in particular. Most importantly, it has provided keen insight into the methodology of empirical research and reporting the results in a professional manner. Special insights and skills have been acquired in the important of clearly defining the research problem and its implications for the research methodology; the difficulty in research design; the role and meaning of statistics in data analysis and interpretation; and the level of scholarship required for professional writing.

Through my extended stay at KFPC, which provided opportunity for one-on-one interactions with the staff members who design and implement the annual employee survey and personal interviews with other employees, I have acquired a better understanding of the impact that the annual survey has on the people in the institution. As a participant in the 1999 annual workplace survey, I had opportunity to experience both the organizational and people sides of KFPC. One of the experiences that I found to be particularly informative was the impact the employee satisfaction survey had on employee morale. I observed that employees became disappointed as the survey continued to be conducted each year and the results reported to them, while management did not seem to use the findings to initiate change. Employees often questioned the motives of management and the usefulness

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of the information which they had provided, as nothing seemed to have

happened as a consequence of its collection. In some cases, this attitude

further polarized the operative and managerial staff at KFPC.

From this experience, I have learned the importance of actually using the

results of employee surveys to address critical personnel issues. Both

professionally and personally, observing employee reactions and attitude

toward the annual employee survey in the absent of perceived, meaningful

change was the most valuable aspect of the research project. Therefore, I

hope and trust that the findings of this study and the data from the employee

annual surveys will encourage the management at KFPC to take appropriate

actions to adequately address the personnel problems/issues which have

been identified.

Finally, this research experience has made me humble as a developing

scholar and management practitioner.

#### **CHAPTER 2**

## LITERATURE REVIEW

This chapter presents a review of the literature on employee turnover and job satisfaction. It begins with a consideration of employee turnover from psychological as well as social perspectives. A definition of employee turnover is provided; issues surrounding various aspects of the definition are discussed. Job satisfaction is then explored, beginning with a consideration of the importance of studying job satisfaction. A definition of job satisfaction is given, ways to assess job satisfaction are discussed and antecedents of job satisfaction are categorized. And, finally, studies on the relationship between employee turnover and job satisfaction are reviewed. Different perspectives that impact the relationship of the two variables — employee turnover and job satisfaction — are presented, and notions of causation and correlation are covered. A model of employee turnover as a function of job satisfaction is offered, accompanied by relevant findings from previous research.

## **Employee Turnover**

## Definition and nature of employee turnover

Employee turnover – people leaving organizations – is a major organizational phenomenon. In recognition of this fact, turnover is included in many definitions of "organizational effectiveness" (Steers, 1992). However, it would be simplistic to view turnover only from a negative perspective since there are occasions when turnover has positive organizational implications (Staw, 1995). It would be further simplistic to view turnover only from the organization's perspective, as it is an important behavior from the individual and societal perspectives as well (Dalton and Todor, 1994; Mobley, Griffeth, Hand, and Meglino, 1994; Muchinsky and Tuttle, 1994). Additionally, it is important to consider the consequences of turnover for the individuals who remain – a frequently over-looked perspective (Mowday, 1996; Steers and Mowday, 1996).

Understanding and effectively managing certain types of employee turnover require some knowledge and special skills. This includes, but is not limited to, skills in integrating individual, organizational, and environmental perspectives; recognizing both the positive and the negative potential consequences of turnover; basing strategies for dealing with turnover on economic and cost

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data, employee perceptions, attitudinal and behavioral data, and individual

and organizational evaluative data; recognizing that turnover, with its multiple

causes and consequences, is an ongoing process, not a static event; and

adopting a proactive rather than reactive posture in managing turnover.

The general definition of employee turnover is "the cessation of membership

in an organization by an individual who received monetary compensation from

the organization" (Mobley, 1997). Several aspects of this general definition

require comment. First, the focus is on cessation or separation from an

organization and not on the related but distinct issues of accession, transfer,

or other internal movements within an organization. Second, the focus is on

employees, those who receive monetary compensation from the organization

as a condition of membership. Finally, this general definition of turnover is

applicable to any type of organization - manufacturing, service, government,

and others - and is applicable to any type of employee-organization

relationship arrangement, including part-time or full-time as well as hourly or

periodic salary arrangements. The controlling part of this definition is that the

individuals receive monetary compensation for their membership in the

organization (Price, 1992).

Given this general definition of employee turnover, it is possible to distinguish

among various types of cessation. A frequently used distinction is between

voluntary separations (employee-initiated) and involuntary separations

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(organization-initiated, plus death and mandatory retirement). The U.S. Bureau of Labor Statistics classifies separations in three ways: "quit", "layoff", and "other" (The U.S. Bureau of Labor, 1995). These distinctions are deceptively simple. More definitive categories are needed since the understanding and effective management of employee turnover require

definitive and reliable schema for measuring and classifying types of turnover.

Early employee turnover research established correlational relationships between personal variables, job satisfaction, organizational commitment, intentions to quit, alternative job opportunities and turnover. More recent research developments have considered multivariate models that conceptualized turnover as a dynamic process occurring over time (Sofer, 1994). Researchers documented significant trends in the workplace in the 1990s as compared to working conditions in previous decades. These trends include the following: an increasing emphasis on cognitive rather than manual skills, increasingly complex organizational systems, increasing competition and environmental uncertainty, advancements in technology that quicken the pace of information transference as well as the speed of the work itself, increasing diversity in the workforce, and global interdependence (Moore, 1998).

There are several important points to consider about employee turnover from previous research. First, turnover can have positive and negative implications

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for individuals, their careers, and their self-concept. It affects the "stayers" as

well as the "leavers" (Sheehan, 1988; Hall, 1994). For example, the remaining

employees may have to accept a larger caseload to accomplish work formally

done by the departing employees. On the other hand, the remaining

employees would likely increase their internal mobility opportunities and

possible promotions.

Second, turnover is potentially costly and organizations need to document

these costs carefully (Gaudet, 1990). Excess turnover imposes additional

costs in terms of recruitment and training, which makes additional demand

upon the organization's unpredicted extra budget.

Third, turnover can positively impact organizations. In many cases, turnover

can create opportunities for promotion, infusing new ideas and technology via

replacements, stimulating changes in policy and practice, and removing poor

performers (Staw, 1995).

Fourth, lack of turnover can create its own set of problems, such as blocking

career-development paths, entrenching dated methods, and accumulating

poor performers (Dalton and Todor, 1994).

Fifth, turnover can have societal implications in health-care delivery, military

readiness, corporate productivity and industrial development (Bluedorn,

1996). For instance, because health-care has a direct impact on patients' health or mortality, turnover among their health care providers has been demonstrated to create unpredictable consequences for patients' health.

Sixth, turnover is important in strategic corporate planning, such as periods of rapid staff turnover would cause corporations to emphasize short-term management plans instead of long-term corporate goals (Walker, 1995).

Finally, by identifying the key precursors to turnover, organizations can intervene to control unwanted turnover and further to reduce of entrenched conflict (Moore, 1998).

## Causes and correlates of employee turnover

Although the various determinants of turnover are interrelated, for clarity of discussion it is presented here in terms of each of the general classes previous researchers have provided. This includes economic variables (Price, 1992, Schein, 1993; Hulin, 1994; Wachter and Kim, 1994; Drucker, 1995; Nollen, 1995; Walker, 1995); organizational variables (Dalton and Todor, 1994; Muchinsky and Tuttle, 1994); and individual variables (Bartol, 1994; Decker and Corneilius, 1994; Muchinsky and Tuttle, 1994; Schuler, 1995; Wanous, 1995; Martin, Price and Mueller, 1996; Mobley, 1997).

Table 2.1 provides an interpretive summary of research on variables related to turnover. Variables are classified in terms of the support for a strong generalization linking the variable to turnover. Every variable listed in this table is potentially related to turnover. However, the variables listed in the "consistent" and "moderate" support columns appear to support the strongest generalizations and thus should receive particular attention in an organizational study. It is important that multiple variables are studied in combination and over time, and that the multiple consequences of turnover are evaluated.

There were several studies addressed on this issue. In a study, a survey instrument was used which assessed different distinct areas of the workplace to determine the factor of staff turnover problem in a government office in the State of Georgia (Herring, 1985). The results showed that participants who quit for organizational reasons were most dissatisfied with pay and promotional opportunities. It was indicated that pay levels showed a significant correlation to staff turnover. In comparison, the satisfaction with promotion opportunities was only moderately related to staff turnover. This study also showed that participants who terminated employment due to personal reasons exhibited significantly greater satisfaction than those participants who quit their jobs because of organizational reasons (Herring, 1985).

Table 2.1

An interpretive summary of research on causes and correlations of turnover

	Consistent	Moderate	Inconclusive
Labor Market	* Level of unemployment		* Inflation
Organizational Variables	* Pay levels	* Supervisory style	* Type of industry
		* Work-unit size	* Organization size
		* Routinization, task repetitiveness	
		* Autonomy/Responsibility	
		* Centralization/Integration * Communication	•
Individual Variables	* Age	* Family responsibility	* Personality
	* Tenure	* Interests	* Education
	* Satisfaction with job content	* Aptitude and ability	* Professionalism
		* Satisfaction of pay	* Performance
		* Satisfaction of promotion	* Career expectations
		* Satisfaction of coworkers	* Absenteeism
		* Satisfaction of supervisor	f
		* Satisfaction of conditions of work	
		* Expectancy of finding an alternative	
Integrative Variables	* Overall satisfaction		* Stress
	Behavioral intentions to quit     Organizational commitm	ent	

#### Source:

James L. Price. (1992). The Study Of Turnover. Iowa State University Press, IO. pp. 112.

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In another study, researchers investigated the relationship of transformational

and transactional leadership on employee turnover intentions. The research

was performed at two large organizations in the State of Florida (Russell,

1996). The findings indicated a moderate relationship between the

transactional leadership and employee turnover intent. The relationship was

shown to be negative. In other words, higher transformational leadership

behavior was related to lower turnover intent (Russell, 1996).

Consequences of employee turnover

Relative to causes of turnover, consequences have been under-emphasized.

A number of scholars have begun to address more systematically the

conceptual and empirical issues associated with turnover consequences

(e.g., Hall, 1994; Price, 1992; Schein, 1993; Dalton and Todor, 1994; Staw,

1995; Wanous, 1995; Steers and Mowday, 1996; Staw and Oldham, 1997).

Table 2.2 summarizes the possible positive and negative consequences of

turnover from these studies.

This table is not exhaustive, the cells are not mutually exclusive, and a given

consequence is contingent on a number of other variables. However, this

table and the preceding discussion serve to illustrate that it is simplistic to

think of turnover in terms of any single consequence.

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 Table 2.2

 Examples of possible positive and negative consequences of employee turnover

Organization	Individual (leavers)	Individual (stayers)	Society
Possible Negative Consec	quences		
* Costs (recruiting, hiring, assimilation, training)	* Loss of seniority and related perquisites	* Disruption of social and communication patterns	* Increased costs of production
* Replacement costs	* Loss of non-vested benefits	* Loss of functionally valued coworkers	* Regional inability to keep or attract industry
* Out-processing costs	* Disruption of family and social support systems	* Decreased satisfaction	
* Disruption of social and communication structures	* Inflation-related costs (e.g., mortgage cost)	* Increased workload during and immediately after search for replacement	
* Productivity loss (during replacement search and retraining)	* Transition-related stress	* Decreased cohesion	
* Loss of high performers	* Disruption of spouse's career path	* Decreased commitment	
* Decreased satisfaction among stayers	* Career-path regression		
Possible Positive Conseq	uences		
* Displacement of poor performers	* Increased earnings	* Increased internal mobility opportunity	* Mobility to new industry
* Infusion of new knowledge/technology via replacements	* Career advancement	* Stimulation, cross- fertilization from new coworkers	* Reduced income inequities
* Stimulate changes in policy and practice	* Better " person- organization fit"	* Increased satisfaction	* Reduced unemployment and welfare costs in a declining labor market
* Increased internal mobility opportunities	* Renewed stimulation in new environment	* Increased cohesion	* Decreased job stress- related costs
* Increased structural flexibility	* Attainment of non-work	* Increased commitment	
* Decreased in other "withdrawal" behaviors	* Enhanced self-efficacy perceptions		
* Opportunities for cost reduction, consolidation			,
* Reduction of entrenched conflict			

Source:

Frank J. Gaudet. (1990). Labor Turnover: Calculation And Cost. American Management Association, NY. pp. 32.

Progress toward understanding turnover consequences and integrating such understanding into more effective turnover management requires further development in at least two areas. First, additional conceptual and empirical research on specifying organizational, individual, and societal consequences and processes such as that initiated by many scholars, respectively, is needed. Second, further development of human resource accounting and human resource planning technology is required so that the various positive and negative consequences can be integrated into some form of net utility index (Mirvis and Lawler, 1992; Martin, Price and Mueller, 1996; and Gustafson, 2000). However, more attention to measuring and integrating costs and consequences, and to relating such utility estimates to predictors of turnover is required for effective management of turnover.

## Analyzing employee turnover

There are a number of general approaches that analyze of turnover rates, causes and consequences within the organization (Price, 1992; Landy and Farr, 1995; Staw, 1995). From these general approaches, it can be recognized that meaningful analysis requires more than computation of aggregate turnover rates and exit interviewing –perhaps the primary analytic procedure utilized by many organizations. In addition, and more importantly, these general approaches indicate the need for further analysis of turnover,

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for example in relation to position, performance, tenure, location, supervisor,

reason, and other classification categories such as the ones presented in

Table 2.3. Therefore, the need for this study is warranted to clarify the

relationships of these significant variables.

Analysis should include both separation and wastage rates. Sources of data

on causes include personnel records, regular employee surveys, exit

interviews, follow-up surveys of employee who leave, and competitive

analyses to include factors in addition to monetary compensation. Tracking

cohorts that enter the organization at the same time through periodic surveys

or interviews and comparing "Stayers" and "Leavers" can be particularly

useful diagnostic techniques. Surveys and interviews should assess not only

present job perceptions and attitudes, but also expectations regarding the

individual's career, perceptions of alternative jobs, non-work values, and

intentions to stay.

Only after valid diagnostic information on the causes, correlates, and

consequences of turnover has been gathered, can effective turnover

management and control strategies be designed.

#### Table 2.3

A major organization's reason for turnover categories

## **DISSATISFACTION:** Wages-amount

Wages-equity Benefits

Hours or shift

Working conditions

Supervision-technical

Supervision-personal

Coworkers

Job security

Job meaningfulness

Use of skills and abilities

Career opportunities

Policies and rules

Other:	

#### LIVING CONDITIONS:

Housing

Transportation

Child care

Health care facilities

Leisure activities

Physical environment

Social environment

Education opportunities

Other: \_

#### PERSONAL:

Spouse transferred

To be married

Illness or death in family

Personal illness

Personal injury

Pregnancy

#### **ALTERNATIVES:**

Returning to school

Military service

Government service

Starting own business

Similar job: same industry

Similar job: other industry

Different job: other industry

Voluntary early retirement

Voluntary transfer to subsidiary

(loss of seniority)

New position:

Organization

Position

Location

Earnings

#### **ORGANIZATION INITIATED:**

Resignation in lieu of dismissal

Violation of rules, policy

Unsatisfactory probation period

Attendance

Performance

Lavoff

Layoff: downgrade refused

Layoff: transfer refused

End of temporary employment

#### OTHER:

Transfer to: Leave of absence from:

On loan to:

Retirement

Death

Source:

William H. Mobley. (1997). Employee Turnover: Cause, Consequences, and Control. Addison-

Wesley, Ml. pp. 38.

## Controlling employee turnover

There are some ways management can effectively control turnover. "Control" does not mean undifferentiated attempts to minimize turnover, since there are a variety of instances where turnover can have positive organizational and individual consequences. Therefore, "control" should be defined as effectively managing turnover; encouraging turnover where it will have net positive consequences, and seeking to minimize turnover where it will have net negative consequences.

Therefore, effective management of turnover requires examination of the entire human resource management process, including recruitment, selection, and early socialization (Porter, Lawler, and Hackman, 1990; Horner, 1994; Arvey, 1994; Wanous, 1995); job content and design (Hackman and Oldham, 1995; Sherbert, 2001); compensation (Borman, 1994; Landy and Farr, 1995; Lawler, 1996); leadership and supervision (Grean, 1991; Latham and Wexley, 1996); career planning and development (Schein, 1993; Walker, 1995; Reddy, 1996); and working conditions and schedules (Drucker, 1995; Wachter, 1995; Nollen, 1995; Peters, Jackofsky, and Salter, 1996). In addition, there are several opportunities for effective management of turnover, such security, as team building, centralization, communications, organizational commitment, and encouraging turnover (Minton, 1988; Price, 1992; Mowday, Steers and Porter, 1994; Woodman and Sherwood, 1995).

## **Job Satisfaction**

## The nature of job satisfaction

Job satisfaction is a topic of wide interest to employees, organizations, and scholars who study the subject. It is a central topic of interest in both empirical research and within the theory of organizational phenomena ranging from job design to supervision. Job satisfaction is simply how people feel about their jobs in general and different aspects of their jobs. It is the extent to which people like (satisfaction) or dislike (dissatisfaction) their jobs. As it is generally assessed, job satisfaction is an attitudinal variable. In the past, job satisfaction was approached by some researchers from the perspective of need fulfillment – that is, whether or not the job meet the employee's physical and psychological needs for the things provided by work, such as pay (Herring, 1985; Wolf, 1995). However, this approach has been deemphasized because today most researchers tend to focus attention on cognitive processes rather than on underlying needs. Therefore, the

attitudinal perspective has become the predominant one in the study of job

satisfaction.

Job satisfaction traditionally defined as a job attitude or summated feelings

toward the job from previous research has indicated a relationship with a

variety of organizationally relevant outcomes. These outcomes include

employee performance, absenteeism and turnover (Huff, 2000). Although

significantly related, the relationships between job satisfaction and outcomes

variables have demonstrated modest findings from previous research (r = + -

.20). Furthermore, the strength of the relationship between satisfaction and

each outcome can vary greatly from study to study, demonstrating both

positive and negative relationships between the same variables (Huff, 2000).

From these inconclusive findings, it continues to be imperative to further

research the relationship between job satisfaction and the spectrum of

outcome variables. More complete understanding of the various influences

and complex interaction pattern between job satisfaction and outcome

variables is seen as an important and valuable tool for the development of

effective employment intervention strategies that can deal with the damaging

impact of employee turnover.

There are several important reasons why it is necessary to be concerned with

job satisfaction. They can be classified according to the focus on the

employee or the organization. First, from a humanitarian perspective, it can be argued that people deserve to be treated fairly and with respect and job satisfaction is to some extent a reflection of good treatment. It also can be considered an indicator of emotional well-being or psychological health. Second, the utilitarian perspective is that job satisfaction can lead to behavior by employees that affect organizational functioning. There are important implications of employees' feelings, which can lead to both positive and negative behavior. Furthermore, job satisfaction can be a good indicator of organizational functioning. Differences among organizational units in job satisfaction can indicate potential trouble spots. Recognizing these reasons for differences in job satisfaction among various organizational units can help to focus on and use relevant factors in constructing an intervention in the employment setting that would optimally result in a reduction of negative behavior and increase of job satisfaction. This would ultimately create a more positive and more productive work environment for both employees and the employer.

## Measurement of job satisfaction

Job satisfaction is usually measured using interviews or questionnaires administered to the job incumbents in question. Although interviews are used in some cases, most research is done by using the questionnaire to collect

data. This is primarily because the interview is expensive and timeconsuming to conduct (Spector, 2000).

Perhaps the easiest and most popular way to assess job satisfaction is to use

many studies, their reliability and validity has been established. For example:

one of the existing scales. Several have been carefully developed, and in

the Job Satisfaction Survey (JSS), the Job Descriptive Index (JDI), the

Minnesota Satisfaction Questionnaires (MSQ), and the Job Diagnostic Survey

(JDS) are facet measures of job satisfaction (Hackman and Oldham, 1991;

Weiss, Dawis, England and Lofquist, 1992; Smith, Kendall, and Hulin, 1994).

Each of these instruments has been applied in a great number of research

studies. There are also two examples of general job satisfaction scales

including the Job in General Scale (JIG) and the Michigan Organizational

Assessment Questionnaire (Cammann, Fichman, Jenkins and Klesh, 1994;

Ironson, Smith, Brannick, Gibson and Paul, 1999).

Antecedents of job satisfaction

Antecedents of job satisfaction can be classified into two major categories.

The first category is environmental antecedents of job satisfaction, and the

second category is personal antecedents of job satisfaction (Kristof, 1996).

The job environment itself and factors are thought to be associated with the job are important influences on job satisfaction. This includes how people are treated, the nature of job tasks, relations with other people in the workplace, and rewards. There are several theories in this category, including the job characteristics and job characteristics theory (Hackman and Oldham, 1995; Griffin, 1996; Wall and Martin, 1997; Campion, 1998); organizational constraints (Peter, O'Connor and Rudolf, 1995; Jex and Gudanowski, 1997); work-family conflict (Beatty, 1996; Hugick and Leonard, 1996; Stewart and Barling, 1996; Rice, Frone, and Moffett, 1997; Thomas and Ganster, 2000); pay (Herring, 1985; Rice, Phillips, and McFarlin, 1995); job stress (Jex and Beehr, 1996; Cooper and Cartwright, 1999); workload (Jex and Beehr, 1996; Fox, Dwyer, and Ganster, 1998; Spector and O'Connor, 1999); and work schedules (Raggatt, 1996; Pierce and Newstrom, 1997; Krausz and Freibach, 1998; Ralson, 1999).

Furthermore, in considering the effect on job satisfaction in relation to how employees are treated, research has investigated the effect of participative management initiatives on employees. A study that analyzed the effect of participative management initiatives on workers employed by a university service operations center revealed significant findings (Sefton, 1999). That is, the employees who work for an organization which supports employee participation scored mean values above the mid-point on indexes of job satisfaction, communication satisfaction and organizational commitment

(Sefton, 1999). This study indicated a positive effect of participative management practices on job satisfaction that could further refine an effective intervention strategy to increase job satisfaction.

In another longitudinal study, the effects of leadership style on job satisfaction and employee turnover were investigated (Fazio, 1999). Researchers analyzed the impact of leadership change over a three-year time frame. The research findings indicated that the democratic style of management significantly reduced employee turnover and enabled the employer to realize sales gains and reduce labor costs (Fazio, 1999).

Other studies have examined elements of organizations that impact the attitudes toward job satisfaction. In a study investigating how a shift in organizational culture impacted on attitudes toward job satisfaction over thirteen years, employees of a medium-sized, consumer-owned electric utility were given the Science Research Associate Employee Inventory, a review of organization's documents and Subjective Job Satisfaction the а Questionnaire (Browder, 1993). Elements of job satisfaction assessment included job demands, working conditions, pay, employee benefits, supervisor/employee interpersonal relations, confidence in management, technical competence of supervision, effectiveness of administration, adequacy of communication, security of job and work relations, status and recognition, identification with the company and opportunity for growth and advancement. The results indicated that areas of attitude improvement included pay, benefits and effectiveness of administration. The results also showed that employees with higher education levels and more behavioral training might have higher expectations of their supervisor (Browder, 1993).

In another study investigating organizational factors that contribute to a high voluntary turnover rate among salespeople, a questionnaire that explored attitudes about job satisfaction was given to sales employees at a Fortune 500 business service companies (Langdon, 1996). There were three general findings regarding the level of job satisfaction among those sales employees. One finding was that the sales employees considered the rewards worthless. That is, when balanced against the demanding nature of their job, the pay, promotions, benefits, training, and so forth were not sufficient to justify the effort needed to succeed in their job. Primarily, the reasons were insufficient pay, lack of opportunities for advancement and lack of training (Langdon, 1996).

Another finding was that the employees were very satisfied in their degree of feeling valued. Their managers were evaluated as effective listeners and in support of their efforts. The frustration focused on issues employees indicated were outside their managers' control. And, the third finding was the employees felt the job requirements exceeded the rewards and respect they

received in return (Langdon, 1996). These findings can be used to help outline specific strategies for reducing sales employee dissatisfaction.

In addition, in testing an integrated model of voluntary employee turnover, researchers examined the relationship of several aspects of the job and the organization, job satisfaction, organizational commitment and turnover intentions (Moore, 1998). The results suggested that there are several factors that influence employees' attitudes. These attitudes, in turn, have an impact on employee turnover. Further, this study tested the main and moderating effects of perceived job alternatives. The factors studied included job characteristics. benefits. coworker relations. organizational communication and internal job mobility. Contrary to predicted relationships, the role of perceived job alternatives did not play a significant role in predicting turnover intentions or moderating job satisfaction (Moore, 1998).

In addition, there are a number of individual factors that can potentially influence job satisfaction. This includes both personality and prior experiences. There are several studies that examine the links between personality traits and job satisfaction (Spector, 1993; Williams and Gavin, 1996; Judge, 1997; Spector and O'Connor, 1999; Moyle, 2000); and person-job fit (Edwards, 1996; Jex and Gudanowski, 1997; Molye, 2000).

In a study considering a causal model of turnover, job satisfaction of registered nurses was explored through the use of a questionnaire. The questionnaire was distributed to the participants to complete three times at a six-month interval that measured Individual and Professional Characteristics and Employment Attitudes (Sofer, 1994). The study tested the notion that the dissatisfied nurse would begin to think of leaving and subsequent resignation would be possible to predict. The results revealed a sample of nurses who were reasonably satisfied with their jobs and generally had little intention of quitting. The participants' highest priority was to be a good mother, followed closely by being a good wife (Sofer, 1994).

Both categories of antecedents often work together to influence employee job satisfaction. The fit between the individual and the job has been shown to be an important influence on employee job satisfaction. Researchers have explored the interaction between the antecedent variables, job satisfaction and employee turnover. In an empirical test of a cost/benefit analysis of job satisfaction, researchers considered the two-factor theory of work motivation (Levy, 1995). According to this theory, job aspects that lead to satisfaction are separate and distinct from factors that lead to job dissatisfaction. Variables that lead to job satisfaction are viewed as intrinsically based and produce feelings of psychological growth. In contrast, variables that result in job dissatisfaction are external to the job and bring about unhappiness and discomfort when they are absent or are perceived to be dissatisfactory. The

results indicated partial support for the Cost/Benefit model. Internally motivated factors, considered only to produce satisfaction, also predicted turnover, a form of dissatisfaction (Levy, 1995).

## Potential effects of job satisfaction

There are many behaviors and employee outcomes that have been hypothesized to be the result of job satisfaction or dissatisfaction. These include not only work variables such as job performance (laffaldano and Muchinsky, 1990; Caldwell and O'Reilly, 1995); organizational citizenship behavior (Schnake, 1996; McNeely and Meglino, 2000; Organ and Ryan, 2000); and withdrawal behavior (Scott and Tylor, 1990; Shore, Newton, and Thornton, 1995; Mitra, Jenkins, and Gupta, 1997; Tharenou, 1998; Tett and Meyer, 1998; Haccoun and Jeanrie, 2000), but also non-work variables such as physical health (Lee, Ashford, and Bobko, 1995; Brief, Burke, George, Robinson and Webster, 1998; O'Driscoll and Beehr, 1999); counterproductive behavior (Greenberg, 1995; Chen and Spector, 1997); and life satisfaction (Rain, Lane, and Steiner, 1996; Hugick and Leonard, 1996; Judge, Boudreau, and Bretz, 1998).

Many of these hypothesized effects of job satisfaction have been shown to correlate with it; however, it has yet to be established that the relations are in fact causal.

Relationship Between Employee Turnover And Job Satisfaction

The causes and correlates of employee turnover have been studied from many different perspectives. The economist may focus on the relationship between average wages and turnover rates by type of industry (Armaknecht and Early, 1992). The sociologist may compare specific variables, such as occupational group, work group size, or communication pattern (Price, 1992). The human resource planner may look at employee turnover rates by occupational category and the length of service (Johnson, 1982; Walker, 1995). The industrial-organizational psychologist may study individual determinants of employee turnover, such as job dissatisfaction (Kratina, 1990; Hulin, 1993); commitment (Matthai, 1989; Mowday, Steers, and Porter, 1994); or behavioral intentions to

Researchers have investigated the relationship between job satisfaction and various outcome variables including employee turnover extensively. The outcomes have indicated significant variations; as both positive as well as negative relationships between the same variables have resulted. To deal with this, there has been growing appeal for job satisfaction researchers to apply attitude theory to the study of job satisfaction (Huff, 2000). Attitude research recently has indicated that some attitudes act as stable predispositions; while

leave (Kraut, 1990; Mobley, Hornor, and Hollingsworth, 1993).

other attitudes are less stable and, thus, have less influence on thoughts and actions. The attitude strength literature strongly suggests that attitude strength acts as a moderator of relationships between attitudes and behavioral outcomes (Huff, 2000).

In a study that assessed the level of attitude strength associated with job satisfaction and tested the relationship between attitude strength and job satisfaction in the prediction of outcome variables, researchers hypothesized job satisfaction would be significantly related to outcomes when a high level of attitude strength existed (Huff, 2000). The results confirmed the finding that job satisfaction was consistently found to have a significantly stronger relationship with employee job involvement and intention to quit.

Recent researchers investigating job satisfaction and employee turnover have realized the complex, integrative nature of the two variables (Moore, 1998). With this recognition, researchers have investigated main effects and moderating effects of various aspects of the job on job satisfaction and job turnover (Moore, 1998; Bartlett, 1999).

In an effort to explain the variance that has been found in workplace outcomes such as job satisfaction in relation to organizational predictors, researchers combined aspects of two sub-disciplines of psychology, including environmental psychology and organizational psychology. Using the Person-Environment-Fit

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theory, the fit between employees' perceived levels of environmental control and

job autonomy were hypothesized to explain a significant variance in job

satisfaction, environmental satisfaction, job competence, environmental

competence, absenteeism, intent to turnover and job stress (Jones, 1999).

There are several studies demonstrating a causal relationship between job

dissatisfaction and employee turnover (Mobley, Griffeth, Hand, and Meglino,

1994; Bluedorn, 1996; Crampton and Wagner, 1999; Spector, 2000). As

previously stated that causality runs from job satisfaction to employee turnover,

and not the opposite, is supported by the longitudinal designs usually applied to

such studies in which job satisfaction is measured at one point in time, and the

employee turnover occurs much later.

Models of turnover place job satisfaction in the center of a complex process that

involves factors both inside and outside of the employing organization. Figure 2.1

is a simplified model that shows the integrative nature of the two variables.

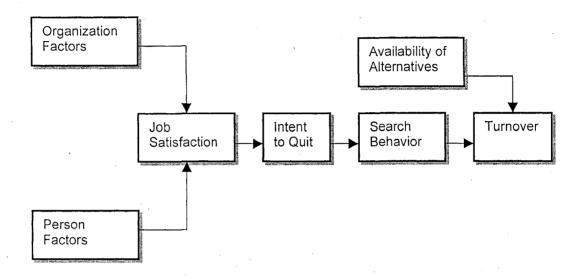


Figure 2.1

Model of employee turnover as a function of job satisfaction and unemployment rate

Paul E. Spector. (2000). Job Satisfaction: Application, Assessment, Causes, and Consequences. SAGE, CA. pp. 64.

According to this model, characteristics of the individual combine with characteristics of the job environment to determine the level of job satisfaction. If the job satisfaction level is sufficiently low, the person will develop a behavioral

intention to quit the job. That intention may lead to job search activities, which, if successful, will lead to turnover. Alternative employment opportunities are important because a person is not likely to quit without another job offer (Ibrahim, 1998; Spector, 2000).

The importance of alternative employment opportunities has been indirectly demonstrated in studies that assessed labor market factors in relation to turnover. It has been found that the unemployment rate correlates strongly with the quit rate in organizations (Carsten and Spector, 1997). In two investigations of the effects of unemployment, it was found that labor market factors interact with job satisfaction in predicting quit rates (Carsten and Spector, 1997; Gerhart, 1998). In these studies, it was shown that job dissatisfaction was related more strongly with turnover during periods of low unemployment than during periods of high unemployment. The explanation is that dissatisfied employees who wish to quit can do so only when it is possible to find an alternative job. Therefore, turnover has been seen as a reaction by individuals to the work environment.

In the summary of the literature review related to the employee turnover and job satisfaction issue, generally speaking, research has found, consistent with predictions, that the highest turnover rates were for people who had favorable dispositions in general but who disliked their current jobs; whereas the lowest turnover rates were for people with favorable dispositions and high job satisfaction (Judge, 1998).

## **CHAPTER 3**

## **METHODOLOGY**

The present study was a comparative analysis of job satisfaction of current and former employees as a basis for better understanding and improving employee turnover at Kirby Forensic Psychiatric Center (KFPC) in New York City in 1999. The research sought to answer the questions: "Is there a measurable pattern of job satisfaction that corresponds with employee turnover at Kirby Forensic Psychiatric Center?" and "Does this pattern indicate that employees who are less satisfied with certain aspects of their jobs are more likely to leave the institution?" Also included in this study was an action plan, based on the findings, for workplace improvement at KFPC.

## Type Of Research And Method

The research for this study is qualitative in nature, as it utilized judgements and subjective interpretation of the data regarding the causes of employee behavior. Qualitative research is based on an anthropological rather than a psychological model. The purpose of qualitative research tends to be the collection and subjective interpretation of data rather than the testing of theory. Qualitative research focuses on the specific context and setting of interactions, rather than

on abstract constructs considered independently from any context. Qualitative researchers strive for completeness of description rather than isolation of variables. Qualitative researchers prefer to consider the subjective quality of an interpretation of the data rather than the use of statistical methods to draw inferences and generalizations. Although some qualitative researchers explicitly avoid the use of any statistical procedures, others may use descriptive statistics or even inferential ones as an adjunct to their approach. Qualitative research does not allow the traditional scientific model of theory formulation, hypothesis generation, data gathering, analysis, and conclusion. It should be emphasized that the term "qualitative research" does not imply that only qualitative variables are studied (Lofland, 1986; Cozby, 1993).

The research method used in this study was a case study. A case study is a research project that involves the intensive investigation of a single individual or group. Case study research is very common in human behavior studies and other fields that emphasize individual differences rather than commonalties. Case study research is subject to bias due to the fact that unusual rather than typical cases are likely to be reported and that hypothesis testing and replication are unlikely. Nevertheless, case studies may be very useful when they serve to disprove a theory, when they illustrate a more general principle, and when they are the only way to study a topic (Yin, 1994). It is rare for case study research to use statistical analyses, but some case studies of treatment techniques use

statistical procedures to measure changes that have occurred over time (Judd, Smith, and Kidder, 1991; Cozby, 1993).

This study was designed to examine employee behavior in an single institution, the Kirby Forensic Psychiatric Center (KFPC), with a focus on employee job satisfaction and the possible links to high levels of employee turnover. The scope of the study included all staff members at KFPC, both current employees in 1999 and staff members who left their employment during the year of 1999. An employee job satisfaction questionnaire was distributed and administered to compare the differences between the two participant groups, i.e. current and former employees, at KFPC and further to identify any patterns of behavior in the participant groups which could provide evidence for solving the employee turnover problem in this institution. This study also included recommendations for improving the work environment at KFPC as well as suggestions for future research.

# Research Design

The design of the study entailed several steps which are presented in Figure 3.1. The first step was the selection of the research site. It addressed the reason for selecting the specific research site and the problem statement. The second step

was data collection, which included accessing the staff turnover records in the Personnel Department and the results of the job satisfaction questionnaire administered to the two participant groups in 1999. All employees of the institution were given the job satisfaction questionnaire. Former employees who terminated their employment with the institution within the calendar year of 1999 were given the same questionnaire. The third step was data analysis and interpretation. A comparison of the responses of those who remained in employment and those who left the institution was made by using t-test (with the Systat® version 10.2 statistical package) as the statistical technique. The fourth step was the presentation of the research findings. It presented the results of the study in descriptive narrative form and data displays in relevant tables and charts. The fifth step was the development of the guidelines for workplace environment improvement. The final step was drawing the conclusions and making recommendations based on the finding of the study.

Figure 3.1 presents the diagram of the research design.

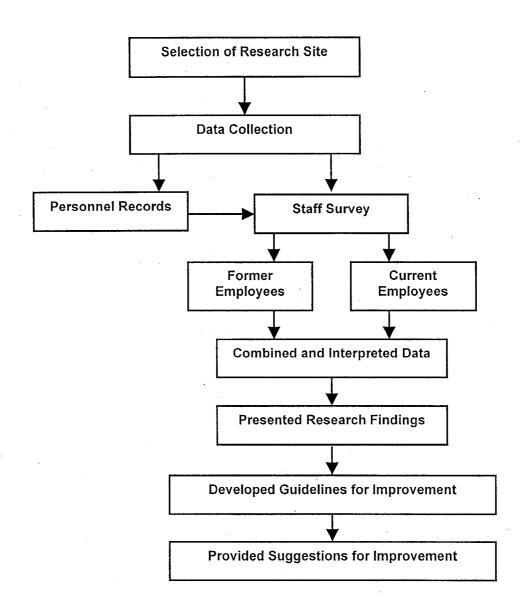


Figure 3.1

Model of the research process

## **Selection And Profile Of Participants**

## Research site selection and approval

Since this was a comparative analysis of job satisfaction of current and former employees as a basis for better understanding and improving employee turnover problems, it was important to select a research site that had a significant staff turnover problem. A review of the employee turnover records for 1997 and 1998 provided by the Personnel Department of the Kirby Forensic Psychiatric Center (KFPC) showed a high staff turnover rate. Tables 3.1 and 3.2 show that the average turnover rates at KFPC across all job classes for 1997 and 1998 were 30.11% and 36.11%, respectively.

The 1998 Annual Report of the New York State Office of Mental Health presented comparison statistics for all 29 mental health institutions in the State. In this report, comparison data were presented on five categories of staff tenure: employee turnover, number of employee accidents, number of injuries, hour of lost time, and hour of overtime. As shown in Table 3.3, the worse record of staff tenure was produced at KFPC in 1998. Especially noted for this study was the average employee turnover rate of 36.11% at KFPC as compared to an average rate of 25.05% for all other comparable institutions in the State of New York for 1998.

Table 3.1

Kirby Forensic Psychiatric Center Employee Turnover Report ---- 1997

	1997			
	No. of Employee	No. of Turnover	Turnover Rate	
	(N)	(n)	(%)	
Psychology	9.	3	33.33%	
Social Work	7	3	42.86%	
Psychiatry	6	. 2	33.33%	
Medicine	2	0	0.00%	
Pharmacy	4	1	25.00%	
Nursing	48	13	27.08%	
Treatment Team Leader	7	3	42.86%	
Dietary	9	3	33.33%	
Dental	3	11	33.33%	
Rehabilitation	14	3	21.43%	
Security Hospital Treatment Asst.	77	. 25	32.47%	
Clerical	6	1	16.67%	
Maintenance/Housekeeping	19	7	36.84%	
Personnel	8	3	37.50%	
Business Office/Storeroom	10	3	30.00%	
Prog. Op./Staff Dev./Risk Manag.	8	1	12.50%	
Safety	29	8	27.59%	
Other	13	4	30.77%	
TOTAL / AVERAGE	279	84	30.11%	

1998 Kirby Forensic Psychiatric Center Annual Report.

Table 3.2

Kirby Forensic Psychiatric Center Employee Turnover Report ---- 1998

	1998					
·	No. of Employee	No. of Turnover	Turnover Rate			
	(N)	(n)	(%)			
Psychology	13	4	30.77%			
Social Work	6	4	66.67%			
Psychiatry	11	3	27.27%			
Medicine	3	2	66.67%			
Pharmacy	3	1	33.33%			
Nursing	53	18	33.96%			
Treatment Team Leader	6	3	50.00%			
Dietary	11	6	54.55%			
Dental	3	. 1	33.33%			
Rehabilitation	13	5	38.46%			
Security Hospital Treatment Asst.	86	29	33.72%			
Clerical	5	3	60.00%			
Maintenance/Housekeeping	25	8	32.00%			
Personnel	8	5	62.50%			
Business Office/Storeroom	10	4	40.00%			
Prog. Op./Staff Dev./Risk Manag.	11	4	36.36%			
Safety	33	10	30.30%			
Other	24	7	29.17%			
TOTAL / AVERAGE	324	117	36.11%			

1999 Kirby Forensic Psychiatric Center Annual Report.

Table 3.3

1998 New York State Office of Mental Health Staff Tenure Report by facilities

Contractor (a)	Turnover	Accident.	Injury 🛴	Lost Time	Overtime
	(%)*	(N)	<sup>80 8</sup> (N)	(Hr)	(Hr)
Binghamton	26.15%	217	40	1209	6574
Bronx	22.89%	95	17	419	2166
Bronx Children's	20.62%	258	47	636	3376
Brooklyn Children's	18.21%	61	11	760	4067
Buffálo	31.75%	278	51	1380	7524
Capital District	26.65%	244	45	1922	10549
Central NY	26.64%	325	60	2109	11586
Central Office	13.08%	88	16	496	3598
Creedmoor	21.07%	163	30	1473	8043
Elmira	20.72%	47	9	760	5067
Hudson River	20.06%	210	39	1876	10290
Hutchings	29.17%	244	45	1163	6314
KFPC	36.11%	583	134	6930	38634
Kings Park	29.79%	163	30	1287	7006
Kingsboro	24.65%	237	44	1519	8302
Manhattan	22.72%	115	· 21	1256	6833
Middletown	27.65%	332	61	992	6363
Mid-Hudson	26.61%	292	54	2279	12537
Mohawk Valley	18.84%	197	36	1194	6487
Nathan Kline Institute	24.21%	7	1	78	2264
NY Psychiatric Institute	27.65%	34	6	295	3474
Pilgrim	31.59%	230	42	2031	11154
Queens Children's	19.15%	285	52	2140	11759
Rochester	19.02%	237	44	1271	6919
Rockland	15.08%	169	31	899	5845
Rockland Children's	29.98%	305	56	1411	7697
Sagamore Children's	27.21%	305	56	1070	6796
South Beach	31.57%	142	26	822	5413
St Lawrence	29.99%	129	24	651	5462
Western NY Children's	32.79%	292	54	791	5240
TOTAL/AVERAGE	25.05%	209.47	39.4	1370.63	7911.30

1998 New York State Office of Mental Health Annual Report.

KFPC for both 1997 and 1998 were compared with the statistical data derived from the universe of all state offices in the State of New York, it was shown that (1) KFPC had an average staff turnover rate of 30% in 1997 (Kirby Forensic Psychiatric Center Annual Report, 1998) compared to an average of 19% for all state offices in the State of New York (New York State Statistical Yearbook, 1998); and (2) an average turnover rate of 36% (Kirby Forensic Psychiatric Center Annual Report, 1999) compared to an average of 22% for

all state offices in the State of New York in 1998 (New York State Statistical

Yearbook, 1999). For a more detailed comparison of KFPC staff tenure with

Furthermore, the statistics indicated that when the employee turnover rates at

These data suggest an anomaly in employee turnover at KFPC that warrants further research to explore in more depth the conditions and/or factors which may be related to the high employee turnover at this institution.

Therefore, a research proposal to explore the quality of employee job satisfaction and its possible links to job turnover was submitted to the senior management team at KFPC in 1999. The proposal was approved by this team and permission was granted to use the Kirby Forensic Psychiatric Center (KFPC) as the single case to be included in this study.

peer institutions, please see Appendix A.

Site description and operating procedures

Kirby Forensic Psychiatric Center (KFPC) is the newest of the three

maximum-security psychiatric hospitals of the New York State Office of

Mental Health. The facility is located on Ward's Island, New York City. It was

established in 1985 to serve and isolate those patients requiring forensic

evaluations and care under maximum-security conditions in the New York

City metropolitan area.

Currently, KFPC provides services for male patients from New York County of

Manhattan and for female patients from all five New York City counties as

well as Nassau and Suffolk counties. Patients are committed under Section

730 of the Criminal Procedure Law of 1985 as lacking capacity to stand trial

or under Section 330.20 of the Criminal Procedure Law of 1993 as not

criminally responsible due to psychological illness or defect. A small number

of patients who are not involved with the criminal justice system but require

maximum security for their treatment is committed under Part 57 of the

Mental Hygiene Law of 1995. (Criminal Procedure Law cited above are

attached as Appendix B.)

The services at Kirby Forensic Psychiatric Center (KFPC) include forensic

services, treatment services, and medical services (Kirby Forensic Psychiatric

Center Facility Orientation, 1996).

#### Forensic services

Admissions to KFPC are court-ordered. The legal provisions of the New York State Law for commitment to KFPC are summarized as follows services (Kirby Forensic Psychiatric Center Handbook, 1995):

- Criminal Procedure Law, Section 330.20, that governs the evaluation and treatment of persons who have been found not responsible by reason of mental disease or defect and who are deemed to be "dangerously mentally ill."
- Criminal Procedure Law, Sections 730.40 temporary, and 730.50 that govern the evaluation and treatment of persons who have been found "unfit to proceed."
- Mental Hygiene Law, Part 57 that governs the treatment of civil
  patients who have been deemed dangerous by a civil
  psychiatric hospital and require psychiatric treatment at a
  maximum security facility.

Patients are discharged from the facility in accordance with the Office of Mental Health standards and court mandates as follows (Kirby Forensic Psychiatric Center Handbook, 1995):

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- CPL 730 patients who have been treated and who have regained "fitness to proceed" status are discharged to the custody of the appropriate correctional institution, and jurisdiction over their criminal case is returned to the sending court.
- CPL 730 patients whose charges have been dropped and whose status have been converted to civil can transferred to a civil psychiatric facility of the Office of Mental Health when they are deemed "no longer dangerous."
- CPL 330.20 patients who have been treated for their "dangerous mental disorder", and who have subsequently been found to be no longer dangerous by the court, but are still in need of inpatient treatment because of their mental disorder are transferred to a civil psychiatric facility of the Office of Mental Health.
- Part 57 patients who have been stabilized and no longer require treatment in a maximum security setting are returned to the sending civil facility.

The recommendations for discharge or transfer are arrived at through a multilevel system of evaluation and review within the hospital. A "treatment team" follows defined procedures in order to reach a determination of, or to re-determine on an annual basis, the appropriate status of the patient. The treatment team consists of a Team Leader, a psychiatrist, a psychologist, a social worker, nurses and security hospital treatment assistants (SHTAs). The treatment team forwards its recommendations regarding change of status, retention, and transfer to a non-secure facility. It also provides recommendations regarding fitness to proceed to the Hospital Forensic Committee, which is staffed by professionals from other wards.

The Hospital Forensic Committee reviews the patient's record and interviews the patient. The patient has the right to have his or her lawyer present during the interview. The Hospital Forensic Committee forwards its recommendations to the Director of Clinical Services who presents the final recommendation to the Executive Director for approval. Fitness reports are then forwarded to the sending court. In cases where a recommendation is made for transfer to a non-secure facility, the materials are forwarded to the Bureau of Forensic Services for review and approval. For CPL 330.20 cases, the applications are then brought before the court and scheduled for hearing. For CPL 730 cases converted to civil status, the decision for transfer is made administratively by the Director of the Bureau of Forensic Services. Court is held twice monthly at KFPC.

Legal services for patients are available through the Mental Hygiene Legal Services, which has offices at KFPC, and through the Legal Aid Society. Patients are allowed to have access to their lawyers by phone at any time (Kirby Forensic Psychiatric Center Facility Orientation, 1996).

#### Treatment services

Treatment is designed to address the patients' clinical as well as legal issues. The treatment approach is multidisciplinary. Patients are assigned to a 24-bed ward managed by a Treatment Team Leader, who is in charge of two treatment wards. In addition to the regular stable core of staff members in the treatment team, other staff members (e.g., Rehabilitation staff, Medical Specialist and Dietician), assigned centrally are invited to participate in treatment team meetings whenever the treatment plan calls for their involvement.

All treatment is carried out with proper regard for each patient's privacy and rights and in accordance with his or her level of functioning and needs for security. Every patient has an individually tailored, goal-oriented treatment plan listing specific clinically and forensically relevant goals and objectives (Kirby Forensic Psychiatric Center Facility Orientation, 1996).

#### Medical services

Kirby Forensic Psychiatric Center (KFPC) has at least one medical specialist who makes daily rounds to see patients. To enhance communication between the ward psychiatrists and the medical specialists, regular meetings between them are mandated. Patients requiring special medical services are referred to the KFPC clinic or near-by public general hospitals (Kirby Forensic Psychiatric Center Facility Orientation, 1996).

The mission of Kirby Forensic Psychiatric Center (KFPC) is to:

"(1) Provide patients with care, evaluation, treatment, and rehabilitation services under safe and therapeutic conditions; (2) Serve the courts via evaluation, consultations, and expert testimony; and (3) Safeguard the community through assuring custody of potentially dangerous individuals. through appropriate notifications of potential victims, through collaboration with law enforcement agencies, and consultation and training of staff at less secure mental health sites in forensic issues as well as in methods for risk assessment, management and treatment of persons prone to violence." (Kirby Forensic Psychiatric Center Facility Orientation, 1996).

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It is Kirby Forensic Psychiatric Center's philosophy that all referred persons

have a capacity for positive change and that interdisciplinary team work and

therapeutic community approaches are best suited to foster active, properly

targeted treatment and rehabilitation (Kirby Forensic Psychiatric Center

Handbook, 1995).

As can be imagined in an organization of such magnitude and complexity

there are many factors that contribute to job stress and the high employee

turnover rates at KFPC in the past few years. Therefore, this study focused

on turnover problems in this institution and attempted to find any potential

solutions that could be addressed by a better understanding these problems.

Profile of participants

Two groups of people were requested to participate in this case study. The

first group included the entire staff of 324 individuals employed at all levels

and in departments at Kirby Forensic Psychiatric Center (KFPC) in 1999. This

group included managerial personnel; medical and health-care staff;

operative employees; and clerical, maintenance, and safety workers. The

second group included 117 former employees who quit their jobs during the

year of 1999. This group also included managerial personnel, medical and

health-care staff; operative employees; and clerical, maintenance, and safety

workers at various levels and in a variety of positions. Therefore, there was a total of 441 participants who were involved in this study.

The goal was to compare employee job satisfaction of these two groups as measured by an employee job satisfaction instrument (a questionnaire) and to identify any patterns in the workplace behavior of these two participant groups that could account for the high employee turnover problems at KFPC.

#### **Nature And Sources Of Data**

Both primary and secondary data were used for this study. The secondary data were the results of the annual employee satisfaction survey conducted by Kirby Forensic Psychiatric Center (KFPC) on its entire staff of 324 *current* employees in 1999. This data set contained responses from managerial, medical and healthcare, and operative (i.e. clerical, maintenance and safety) personnel and had been interpreted and summarized by the Director of Program Evaluation at KFPC. Authorization to use these data for this study was granted by the senior management team at KFPC.

The primary data set was collected especially for this study from an employee job satisfaction survey of 117 *former* employees of KFPC whose employment was

terminated in 1999. No determination was made as to whether the terminations were voluntary or involuntary for this data set. These 117 former employees represented all job levels and departments at KFPC in 1999 and provided responses to the same survey instrument which had been developed and validated by the institution for its 1999 annual employee survey.

As the same instrument was used to provide data from both the *current* and *former* employees of KFPC in the same year (1999), some duplication in responses may have occurred, depending on the time of status change for some employees within this period of time. The extent of this possible duplication in responses was not determined for this data set.

#### Instrumentation

The data collection instrument used for this study was a four-section, 32-item questionnaire (the 1999 Kirby Forensic Psychiatric Center Staff Workplace Survey). The questionnaire was developed and validated by the Director of the Program Evaluation Department at Kirby Forensic Psychiatric Center (KFPC) for the purpose of providing information for personnel records and decision making at KFPC. Section I of the instrument requested information on employee demographics. Section II had a Likert-scale format and consisted of six items on

employee satisfaction or dissatisfaction with various aspects of the specific work environment and the general organizational context. Section III also had a Likert-scale format and consisted of 21 items and requested information on employee satisfaction or dissatisfaction with various dimensions of their respective jobs. Section IV consisted of five items in open-ended format and requested employee opinions on their overall or general impression of KFPC and suggestions for improvements (See Appendix C).

This study was designed as qualitative analysis research; therefore, only data from Sections II and III were selected to be used in this study. There was a total of 27 questionnaire items in Sections II and III combined and these questionnaire items were clustered into eight dimensions. The rationale for this followed a theoretical approach, i.e. those questionnaire items that were deemed to have some degree of similarity from a theoretical perspective were grouped together. My own judgement in grouping these items was validated in discussions with the designer of the questionnaire in the field of job satisfaction and employee turnover at KFPC. Given the fact that the questionnaire was developed from a very practical approach, rather than an empirically stringent consideration, this method appeared to be superior to the empirical approach (e.g. cluster and factor analyses). The eight dimensions are employees' perceptions of (1) the organizational context, (2) the opportunities for promotion and reward, (3) the access to training, (4) the institutional rules and regulations, (5) the nature of the work, (6) the supervisors, (7) the relationship with co-workers, and (8) the

organizational commitment. Each dimension typically included several questionnaire items addressing the respective topic. The following list identifies the questionnaire items related to each individual dimension:

## The organizational context

- III-4: KFPC is a well-managed hospital.
- III-6: I feel that people from diverse cultural background are well accepted within the organization.
- III-7: The employee orientation at KFPC is adequate.
- III-8: I feel that information and changes affecting the operation of hospital are effectively communicated to me.
- III-11: Employees are empowered to make their own decisions.
- III-17: KFPC is a highly efficient, work-oriented place.

## The opportunities for promotion and reward

- II-3: How satisfied are you with your chances for advancement/promotion?
- III-16: Hard work is appreciated and rewarded at KFPC.

#### The access to training

II-4: How satisfied are you with your access to needed training?

## The institutional rules and regulations

- III-13: Policies and regulations are generally clear and understandable.
- III-20: Rules and regulations are well enforced.

#### The nature of the work

- II-2: How satisfied are you with your ability to have meaningful input into how you do your job?
- II-5: How satisfied are you with your job as a whole?
- III-1: The work is really challenging.
- III-12: I enjoy my job.
- III-19: My job function and responsibilities have been clearly explained to me and I understand them.

### The supervisors

- II-6: How satisfied are you with your immediate supervisor?
- III-3: Supervisors treat me with respect.
- III-9: Supervisors usually compliment employees who do something well.
- III-21: Supervisors meet with employees regularly to discuss their future work goals.

## The relationship with co-workers

II-1: How satisfied are you with your co-workers?

III-2: Employees at KFPC go out of their way to help a new employee feel comfortable.

III-5: I have a good working relationship with my coworkers/associates.

## The organizational commitment

III-10: I am proud to work at KFPC.

III-14: I will be working at KFPC one year from now.

III-15: I will be working at KFPC five years from now.

III-18: People put a lot of effort into what they do at KFPC.

Assigning numbers in using a Likert scale allowed each participant in this study to rank his or her responses according to preference. By using a Likert scale, the results indicated whether one group was more or less satisfied than the other group on each of the variables measured.

For example, in Section II, one question was "How satisfied are you with your job as a whole?" Each participant was requested to provide his/her response by using the six-point scale. In Section III, the following statement appeared in the questionnaire: "The work is really challenging." Each participant was again asked to use the six-point scale in responding the statement.

The psychometric value of the questionnaire was slightly limited, in that it did not cover several important categories, such as base pay and benefits. The reason these issues were omitted from the questionnaire is because under New York State laws, employee pay rates and benefit packages are subject to collective bargaining in accordance with regulations and policies governing collective employment contracts. Therefore, for legal reason, the developer of the questionnaire was prevented from including statements about these issues, which also might be reasons for employee turnover at the institution. In addition, only two Sections out of four Sections in the questionnaire were used in this study. Thus, it may have contaminated the validity of the questionnaire. Further, the structure of the questionnaire, especially the distinction between Sections II and III appeared somewhat arbitrary. For example, there were five questionnaire items concerning the nature of work in the institution, including two items in Section II (i.e. II-2 and II-5) and three items in Section III (i.e. III-1, III-12 and III-19). The distribution of these questionnaire items did not seem to follow any pattern. This might have confused the employees who answered the questionnaire and the interpreter of the results by preventing them from focusing on related questionnaire items. However, it featured many aspects of job satisfaction that are considered in the relevant literature to be crucial in modern research; and overall, it proved to be an adequate research instrument and was used to collect both sets of data for this study.

#### **Data Collection**

With authorization from the senior management team at Kirby Forensic Psychiatric Center (KFPC), the secondary data set was collected by accessing, via computer, the personnel database at KFPC for the results of the institutional survey (1999 Kirby Forensic Psychiatric Center Staff Workplace Survey) of its entire staff of 324 current employees in the calendar year of 1999. These data, which had been analyzed and interpreted by the Director of Program Evaluation at KFPC, were collected by the institution for its own internal use for personnel records and decision-making.

As a participant in the 1999 survey, I assisted in the distribution of the questionnaire to all employees who were present at the annual staff meeting in January 1999. Those employees not present at the meeting received the instrument through their respective supervisors. The majority of employees who were present at the meeting returned the completed questionnaire at the conclusion of the meeting. Those not present at the meeting were requested, through their supervisors, to complete and return the instrument via mail within two weeks (after the annual staff meeting) directly to the Director of Program Evaluation at KFPC. On the closing date which had been set for receipt of all copies of the completed questionnaire, 252 completed copies, or 77.78%, had been received.

The primary data set was collected from a job satisfaction survey of 117 former employees whose employment was terminated at KFPC during the year of 1999. These former employees represented all levels and departments at KFPC. For this data set, no determination was made as to whether these terminations were voluntary or involuntary. As stated previously, this data set was collected by using the same survey instrument (1999 Kirby Forensic Psychiatric Center Staff Workplace Survey) which was used to collect the data for the secondary data set.

From a search of the confidential staff turnover records at KFPC, a list of the names, addresses, telephone numbers and other employment-related information was prepared of these 117 former employees. Using this list, a copy of the survey instrument, a cover letter and a self-addressed and stamped envelope were mailed to each of these former employees between January and December of 1999. The cover letter explained the nature and purpose of the study, the rights and protection of the participants, and invited their participation by filling out and returning the completed questionnaire in the envelope provided within two weeks (See Appendix D). At the end of two weeks, a follow-up was conducted via phone or post card of those who had not returned the instrument at that time. At the end of January 2000, 40 completed copies, or 34.19%, of the 117 mailed copies of the questionnaire had been received.

**Data Analysis And Interpretation** 

The data analysis for this study consisted of organizing and summarizing the

data collected from the two participant groups (i.e. 252 responses from "current

employees" of 1999 and 40 responses from "former employees" who terminated

their employment within the calendar year of 1999). The data analysis began with

data coding from each participant group. Using two data coding sheets, the data

were processed to generate two sets of results (See Appendixes E and F).

On the data coding sheet for the participant group of 252 current staff members,

there were sufficient columns and rows to list responses to all the questionnaire

items from each participant. On the data coding sheet for the participant group of

40 former employees, there were the same number of columns with 40 rows of

data, indicating that one row was allocated to each respondent.

Each column on both data coding sheets was clearly labeled. Starting at the left

margin, the first three columns were labeled "Department" (Department Code),

"Shift" (Day, Evening or Night) and "Gender" (Male or Female). The remaining

columns were labeled for the other 27 questionnaire items, including six

questionnaire items in Section II (i.e. II-1 - II-6) and 21 questionnaire items in

Section III (i.e. III-1 – III21). One column was allotted for each guestion.

Responses contained in Section I of the questionnaire (i.e. 1-3 columns) were not utilized in this study because demographic variables were not considered in relation to job tenure in this study. Therefore, the responses in the 27 columns on the data coding sheets constituted the data in this study. The responses in the "department" column were used to organize and sort the data (See Appendixes E and F).

The 27 columns on the data coding sheets showed the ranking of response to each questionnaire item. When the responses indicated "Very Dissatisfied" or "Highly Disagree" that response appeared on the data coding sheet as "1"; "Moderately Dissatisfied" or "Moderately Disagree" as "2"; "Mildly Dissatisfied" or "Mildly Disagree" as "3"; "Mildly Satisfied" or "Mildly Agree" as "4"; "Moderately Satisfied" or "Moderately Agree" as "5"; and "Very Satisfied" or "Highly Agree" as "6". For those responses which were outside the available spectrum, i.e. either a blank or a number other than "1" to "6", the cells corresponding to the questionnaire items on the data coding sheet, were marked "9".

After the two sets of data were coded, frequency distributions were used to examine the concepts of relative proportions, percentiles, and percentile ranks, representing the frequency of observation that fell within a specific level of variables. In addition, at the preliminary level of data analysis, descriptive statistics were computed separately for the two participant groups. This included medians, means, standard deviations and variances.

Differences between the two groups with regard to the 27 questionnaire items on

the job satisfaction instrument were determined by used of the t-tests for

independent samples, employing the statistical package Systat® (version 10.2).

Different statistical tests allow researchers to use the t-test to determine the

differences between participant groups. The t-test is most commonly used to

examine whether two groups are significantly different from one another (Cozby,

1993). In this study, the t-test was used to determine whether a significant

difference existed between the two participants groups' responses to the different

questionnaire items. Further, the t-test was used to determine the differences

between the two participant groups in the specific job satisfaction dimensions

and their relationship to the employee turnover problems at KFPC.

In greater detail, the rationale for using the t-test for independent samples lies in

the fact that due to very strict data protection measures, it was not possible to

match the individuals from the group of former employees to the participants in

the annual job satisfaction survey at KFPC. Hence, it is potentially possible that

(a) none of the 40 former employees had filled in the questionnaire during the

regular KFPC session, or (b) all former employees had previously filled in the

survey instrument, or (c) any number in-between. The latter is the most likely

scenario. This implies that there is no apparent connection between the two

groups, justifying the use of t-tests for independent samples. On a statistical

note, however, the fact that there is a high likelihood that at least some of the respondents filled in the survey questionnaire both times (i.e., as part of the annual survey and as part of the group of former employees) implies that differences in means between the two groups are likely to be deflated and harder

to detect.

In this study, t-tests indicate whether differences in means of the two participant groups are significant. For that purpose, differences in means are labeled as "significant" for alpha errors smaller than 1 per cent (p< .01). By using an alpha error level of p< .01, it is noted as strength because of the result is more conservative in the study. As there is a high likelihood that due to double inclusion, differences between the two groups are deflated in the present sample, corrections that take into consideration the number of t-tests performed simultaneously (e.g., Bonferroni corrections), were not employed, so as not to inflate the risks of beta errors even further (that is, decrease the likelihood to detect differences that do exist).

### **Data Presentation**

The results are presented as Research Findings in Chapter 4 which emerged from the data analysis and interpretation. First, general results are reported. This is followed by a more detailed analysis of the differences between the two participant groups (i.e. current employees and former employees) on the clustered eight dimensions of the job satisfaction questionnaire, Sections II and III. The research findings of the study are presented in narrative descriptive form with accompanying tables which display the data showing the levels of job satisfaction of the two participant groups at Kirby Forensic Psychiatric Center (KFPC) and the relationship of job satisfaction to employee turnover. Using the findings from the survey of the two participant groups, recommendations were made for improving the workplace environment at KFPC and presented as Chapter 5. Finally, Chapter 6 presents the summary of the research findings, the recommendations for future research, and the study conclusions.

### CHAPTER 4

### RESEARCH FINDINGS

#### Introduction

As previously stated, Kirby Forensic Psychiatric Center (KFPC) had the worst record of staff tenure for 1997 and 1998 in the State of New York. Judging from the results of the annual employee satisfaction survey conducted at KFPC, it is widely assumed by management personnel that there is a relationship between the problematically high employee turnover rates and employee satisfaction. To date, however, KFPC has not been able to prove or disprove this assumption. Therefore, this study was undertaken to explore in more depth the relationship between employee satisfaction and employee turnover KFPC in the State of New York to better assist in solving the high turnover problem at this facility.

This study was a comparative analysis of job satisfaction of current and former employees as a basis for better understanding and improving employee turnover at Kirby Forensic Psychiatric Center (KFPC). Specifically, the study sought to provide answers to the questions: (1) "Is there a measurable pattern of job satisfaction that corresponds with employee turnover at Kirby Forensic Psychiatric Center?" and (2) "Does this pattern indicate that employees who are less satisfied with certain aspects of their jobs are more likely to leave the

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institution?" Also included in this study was an action plan, based on the findings,

for workplace improvement at KFPC. In this chapter, the results of the study are

presented.

After a short discussion of the general results, the findings are organized by the

eight dimensions of the survey instrument as follows: employees' perceptions of

the broad organizational context, opportunities for promotion and reward, access

to training, institutional regulations and rules, the nature of the work, supervisors,

relationship with co-workers, and organizational commitment. Also included in

this chapter are an analysis of the responses to the survey instrument, statistical

applications, emergent patterns of employee turnover behavior, and the

effectiveness of the workplace survey instrument.

**Analysis Of Responses** 

A total of 324 current employees in 1999 participated in this study and received

the questionnaire used in the Kirby Forensic Psychiatric Center (KFPC)

employee job satisfaction survey, from which 252 responses were returned, for a

response rate of 77.78%. A total of 117 former employees who quit their job

during the year of 1999 were given the same survey instrument, from which 40

responses were returned, for a response rate of 34.19%.

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A summary of responses from both participant groups is presented by number

and percentage of personnel in each major department at KFPC in Table 4.1.

Also presented are the response patterns which appear to have emerged from

this analysis.

As shown in Table 4.1, the 1999 current employees in three departments (i.e.

Medicine, Pharmacy and Dental) had a 0% response rate to the questionnaire.

By contrast, three departments (Psychology, Social Work and Psychiatry) had a

100% response rate. Among the departments represented by the 1999 former

employees, four departments (Medicine, Pharmacy, Dental and Clerical) had a

0% response rate to the survey instrument and two departments (Social Work

and Treatment Team Leader) had a 100% response rate. For the former

employees who had a 0% response rate and those with a 100% response rate, it

would be interesting to know if the respective termination of these employees

was voluntary or involuntary.

**Table 4.1**Summary of participants and response rates by job class

	Current	Emple	ovees	Former Employees			
	No. of Staff		Return	No. of Turnover	No. of	Return	
Psychology	13	13	100.00%	4	3	75.00%	
Social Work	. 6	6	100.00%	4	4	100.00%	
Psychiatry	11	11	100.00%	3	2	66.67%	
Medicine	3	0	0.00%	2	0	0.00%	
Pharmacy	3	0	0.00%	11	0	0.00%	
Nursing	53	48	90.57%	18	9	50.00%	
Treatment Team Leader (TTL)	6	4	66.67%	3	3	100.00%	
Dietary	11	6	54.55%	6	2	33.33%	
Dental	3	0	0.00%	11	0	0.00%	
Rehabilitation	13	11	84.62%	5	11	20.00%	
Security Hospital Treatment Asst. (SHTA)	86	77	89.53%	29	4	13.79%	
Clerical	5	3	60.00%	3	0	0.00%	
Maintenance/Housekeeping	25	21	84.00%	8	3	37.50%	
Personnel	. 8	7	87.50%	5	2	40.00%	
Business Office/Storeroom	10	7	70.00%	4	1	25.00%	
Prog. Op./Staff Dev./ Risk Manage.	11	10	90.91%	4	3	75.00%	
Safety	33	8	24.24%	10	1	10.00%	
Other	24	20	83.33%	7	2	28.57%	
TOTAL / AVERAGE	324	252	77.78%	117	40	34.19%	

Two patterns of responses seem to have emerged from this analysis. First, there

appear to have been a larger number of respondents from professional staff. As

shown in Table 4.1, a greater proportion of the mental health professionals

among both the current and former employee groups provided the highest

percentage (100%) of the completed questionnaire. These high response rates

were most likely the results of my personal discussion with these individuals

about the study and the importance of returning the questionnaire. However,

among the professionals, only Social Work had a consistent response pattern of

100% across both groups of participants.

The second pattern appears to have emerged around the number of employees

in each department. First, for both the current and former employees, the

departments with the fewest number of staff members (i.e. Medicine, Pharmacy

and Dental) also had the lowest rate (0%) of returns. Second, it was also noted

that Social Work and Medicine were among the departments with the smallest

staff, but these departments had the highest rate (67%) of employee turnover.

Figures 4.1 and 4.2 present the responses from the current employees in the

year of 1999 and the former employees who quit in 1999 by percentage of these

two groups of participants in each of the major departments at KFPC.

# **Departments by Percentage of Current Employees**

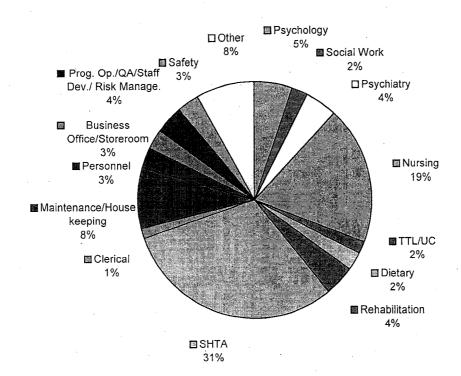


Figure 4.1

Responses from the 1999 current employees by percentage of participants in each department

# **Departments by Percentage of Former Employees**

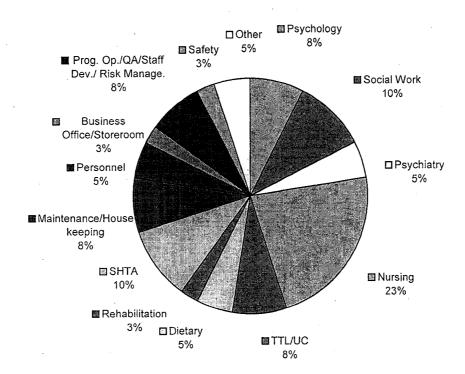


Figure 4.2

Responses from the former employees who quit in 1999 by percentage of participants in each department

## **Statistical Applications**

## Preliminary data analysis and rationale for using t-test

At the first stage, preliminary level of data analysis, descriptive statistics of all data were computed separately for the two participant groups (N=252 and n=40, respectively). This included medians, means, standard deviations and variances. Tables and graphs are used to display the results from the 27 questionnaire items from each participant group (See Appendixes G and H). Detailed results are presented in Table 4.2.

The preliminary, descriptive analysis served two purposes. First, it provided a first picture of job satisfaction within and between the two participant groups. The descriptive analysis revealed that individuals in both groups showed that they have very good relationship with their co-workers (questionnaire item III-5). The group of current employees, however, was empowered at a very low level to make their own decisions (questionnaire item III-7). Former employees, on the other hand, were most negative with respect to their perceived appreciation and reward for hard work (questionnaire item III-16). An interesting finding from the descriptive analysis of standard deviations and variances was that the perceptions of former employees were more homogeneous than the perceptions of current employees, in spite of the small sample size of the former employees (n=40, compared to the current

employees N=252). This may indicate that there is a similar and potentially unique pattern of perceptions among former employees who quit their jobs at Kirby Forensic Psychiatric Center (KFPC), which may be related to the

problem of high labor turnover.

Second, and more importantly, the reason for conducting the preliminary data analysis was to determine whether the statistical preconditions for the t-test, which is used as the main statistical tool in this study, were fulfilled. A number of assumptions have to be met in order to perform t-tests, even though t-tests are very robust against violations of these assumptions.

The first assumption is that the data are measured on an interval scale. As previously stated, the questionnaire format was a six-point Likert scale, which is frequently used in comparable studies as a basis for multivariate statistical procedures. As a result, this assumption can be regarded as fulfilled.

The second assumption is that the variables must be normally distributed. This is usually tested graphically and by analyzing skewness and kurtosis statistics. As Table 4.2 shows, the kurtosis or skewness statistics of all variables but one was below +2 or above -2, the usually accepted range (cf. Rencher, 1995). The only exception was questionnaire item II-5 ('I have a good working relationship with my co-workers/associates.') that has a high kurtosis of 8.07 and a low skewness of -2.13 for the group of those

employees who had left KFPC. This deviation from normal distribution is likely to yield more conservative results for the t-test for this particular item. For all other items, it can be concluded that the normal distribution assumption was not violated.

The final assumption is that the population variances of the two groups are the same. There is no reason to assume that the two groups in this study, i.e. those employees who had left their job at KPFC in 1999 and those who had not, are characterized by different variances. Furthermore, Table 4.2 shows that variances in the two groups are roughly the same. Most importantly, the variances in the smaller group of "former employees" (n=40) are not systematically greater than the variances in the larger group of "current employees" (N=252), which would have inflated or depressed the t-test statistics. On the contrary, as mentioned above, they are even slightly smaller in the smaller group of "former employees". Hence, it can be concluded that the assumptions for performing the t-tests are met in this study.

**Table 4.2**Descriptive statistics for the two participant groups

	Current Employees (N=252)						Former Employees (n=40)						
Item	Median	Mean	SD	Variance	Skewness	Kurtosis	Median	Mean	SD	Variance	Skewness	Kurtosis	
II-1	5.000	4.802	1.171	1.371	-1.169	1.128	5.000	4.725	1.062	1.128	-1.170	1.406	
11-2	4.000	3.833	1.846	3.406	-0.408	-1.249	4.500	4.275	1.396	1.948	-1.176	1.063	
II-3	4.000	3.619	1.657	2.747	-0.219	-1.105	2.000	2.475	1.154	1.333	0.853	1.068	
11-4	4.000	3.450	1.714	2.937	-0.155	-1.376	5.000	4.325	1.745	3.046	-0.834	-0.625	
11-5	4.000	3.976	1.641	2.693	-0.567	-0.833	4.000	3.975	1.732	2.999	-0.614	-0.942	
11-6	5.000	4.655	1.575	2.482	-1.123	0.161	4.000	3.875	1.453	2.112	-0.035	-0.743	
111-1	5.000	4.524	1.625	2.641	-0.947	-0.241	5.000	4.475	1.432	2.051	-1.353	0.983	
III-2	4.000	4.000	1.470	2.161	-0.752	-0.249	4.000	4.000	1.357	1.842	0.932	0.653	
111-3	5.000	4.480	1.583	2.506	-0.981	-0.129	3.000	3.325	1.492	2.225	0.382	-0.790	
111-4	4.000	3.504	1.770	3.135	-0.215	-1.312	4.000	3.800	1.436	2.062	-0.615	-0.144	
111-5	5.000	5.151	0.748	0.559	-0.714	0.773	5.000	5.350	0.700	0.592	-2.130	8.074	
111-6	5.000	4.297	1.611	2.597	-0.918	-0.232	4.000	3.575	1.534	2.353	-0.351	-0.640	
111-7	5.000	4.128	1.612	2.599	-0.692	-0.628	5.000	4.872	1.559	2.430	-1.709	1.945	
111-8	4.000	3.616	1.695	2.872	-0.381	-1.224	4.000	3.700	1.505	2.267	-0.501	-0.498	
111-9	4.000	3.544	1.690	2.855	-0.308	-1.232	3.000	3.125	1.381	1.907	-0.051	-0.396	
III-10	5.000	4.219	1.711	2.928	-0.752	-0.659	4.500	4.025	1.527	2.333	-0.771	-0.317	
III-11	3.000	2.909	1.628	2.649	0.148	-1.322	3.000	3.050	1.449	2.100	-0.038	-1.145	
III-12	5.000	4.406	1.487	2.210	-0.840	-0.060	4.000	3.923	1.178	1.389	-1.573	1.903	
III-13	4.000	3.587	1.524	2.323	-0.184	-0.944	5.000	4.400	1.446	2.092	-0.860	-0.164	
III-14	5.000	4.805	1.498	2.243	-1.457	1.258	3.000	3.125	1.667	2.779	0.526	-0.667	
III-15	4:000	3.524	1.710	2.923	-0.171	-1.177	1.000	1.825	1.059	1.122	1.049	-0.177	
III-16	3.000	3.202	1.869	3.493	0.098	-1.526	2.000	2.400	1.194	1.426	0.868	0.876	
III-17	4.000	3.409	1.654	2.737	-0.064	-1.175	3.000	3.050	1.176	1.382	-0.101	0.237	
III-18	4.000	4.056	1.402	1.965	-0.665	-0.319	5.000	4.250	1.515	2.296	-0.914	0.071	
III-19	5.000	4.294	1.619	2.623	-0.740	-0.518	5.000	4.700	1.344	1.805	-1.219	1.272	
111-20	4.000	3.562	1.601	2.562	-0.206	-1.103	5.000	4.225	1.687	2.846	-0.812	-0.567	
III-21	3.000	3.083	1.744	3.041	0.103	-1.414	3.000	3.025	1.405	1.974	0.012	-0.907	

#### Statistical results

Statistical differences in the 27 questionnaire items between the participant groups (i.e. current employees and former employees) at Kirby Forensic Psychiatric Center (KFPC) were analyzed with t-tests for independent samples (See Chapter 3 for more details). The results of this analysis are summarized in Table 4.3. The 27 questionnaire items in this table are organized around the eight dimensions of the questionnaire, i.e. employees' perceptions of organizational context, opportunities for promotion and reward, access to training, institutional rules and regulations, the nature of the work, supervisors, relationship with co-workers, and organizational commitment.

Table 4.3 presents statistics on the means and standard deviations of current employees (M1 and SD1), the means and standard deviations of former employees (M2 and SD2), the difference in the means of these two participant groups (Md), the t-test statistics (t290), and related probabilities (p) for each questionnaire item. More detailed tables and charts for each questionnaire item are presented in Appendix I.

In this study, using a significance level of .01 and following usual practice, significant differences calculated between these two groups were identified by the value of specific questions. In Table 4.3, under the column "t-test (t290)", significance levels of p < .01 are demonstrated by one asterisk (\*).

Table 4.3
Summary of the t-test results

<del></del>	Questionnaire Item	Current Employee		Former Employee		Difference in Mean	t-Test	Probability
		(M <sub>1</sub> )	(SD <sub>1</sub> )	(M2)	(SD <sub>2</sub> )	(Md)	(t290)	(p)
	loyee's perceptions of organizational context							
III- <b>4</b>	KFPC is a well-managed hospital.	3.504	1.770	3.800	1.436	-0.296	-1.005	0.316
III-6	I feel that people from diverse cultural background are well accepted within the organization.	4.297	1.611	3.575	1.534	0.722	2.648*	0.009
111-7	The employee orientation at KFPC is adequate.	4.128	1.612	4.872	1.559	-0.744	-2.688*	0.008
111-8	I feel that information and changes affecting the operation of the hospital are effectively communicated to me.	3.616	1.695	3.700	1.506	-0.084	-0.295	0.768
111-11	Employees are empowered to make their own decisions.	2.909	1.628	3.050	1.449	-0.141	-0.517	0.605
III-17	KFPC is a highly efficient, work-oriented place.	3.409	1.654	3.050	1.176	0.359	1.319	0.188
Opp	ortunities for promotion and reward							
II-3	How satisfied are you with your chances for advancement/promotion?	3.619	1.657	2.475	1.154	1.144	4.204*	0.000
III-16	Hard work is appreciated and rewarded at KFPC.	3.202	1.869	2.400	1.194	0.802	2.629*	0.009
Acce	ess to training		:		:			1
	How satisfied are you with your access to needed	3,450	1.714	4.325	1.745	-0.875	-2.991*	0.003
nsti	training? utional regulations and rules							
III-13	Policies and regulations are generally clear and understandable.	3.587	1.524	4.400	1.446	-0.813	-3.145*	0,002
II-20	Rules and regulations are well enforced.	3.562	1.601	4.225	1.687	-0.663	-2.413	0.016
The	nature of the work	L						
	How satisfied are you with your ability to have meaningful	3.833	1.846	4.275	1.396	-0.442	-1.448	0.149
11-5	input into how you do your job? How satisfied are you with your job as a whole?	3.976	1.641	3.975	1.732	0.001	0.004	0.997
III-1	The work is really challenging.	4.524	1.625	4.475	1.432	0,049	0.179	0.858
III-12	I enjoy my job.	4.406	1,487	3.923	1.178	0.483	1,933	0.054
III-19	My job function and responsibilities have been clearly	4.294	1.619	4.700	1.344	-0,406	-1.506	0.133
The	explained to me and I understand them. Supervisors	1.201	1.010	4.700	1.044	-0.400	-1.000	0.133
Maria (180)	How satisfied are you with your immediate supervisor?	4,655	1.575	3,875	1.453	0.780	2.938*	0.004
III-3	Supervisors treat me with respect.	4.480	1.583	3.325	1.492	1.155	4.320*	0.000
111-9	Supervisors usually compliment employees who do	3.544	1.690	3.125	1.381	0,419	1,489	0.137
	something well. Supervisors meet with employees regularly to discuss	3.083	<b> </b>	3.025		0.058	0.201	0.137
	their future work goals. relationship with co-workers		1	1 0.020	1 11100			
0.0000000000000000000000000000000000000	How satisfied are you with your co-workers?	4.802	1 171	4 725	1.062	0.077	A 200	
III-2	Employees at KFPC go out of their way to help a new	4.002	1.171	4.725	1.062	0.000	0.389	0.698
III-5	employee feel comfortable. I have a good working relationship with my co-	5.151	0.748	5.350	0.770		0.000	1.000
)ras	workers/associates.	3.131		L 3.300	***************************************	-0.199	-1:559	0.120
	Inizational commitment  I am proud to work at KFPC.	r e	4 744	1,000	4.507		0.070	1
11-14	I will be working at KFPC one year from now.	4.219	1.711	4.025	1.527	0.194	0.673	0.501
11-15	I will be working at KFPC five year from now.	4.805	1.498	3.125	1.667	1.680	6.452*	0.000
	People put a lot of effort into what they do at KFPC.	3.524	1.710	1.825	1.059	1.699	6.018*	0.000
	, , a man or the trible trible triby do delier of	4.056	1.402	4.250	1.515	-0.194	-0.804	0.422

The differences between the two participant groups in this study appear in the column of Table 4.3, labeled "t-test", where responses to each questionnaire item from the group of current employees were compared to the responses to each questionnaire item from the group of former employees. In Table 4.3, the difference in means indicates either positive or negative differences. When the difference in means is positive, it indicates that the group of "current employees" scored higher than the group of "former employees" for the respective questionnaire item. In other words, when the difference in means is positive, it indicates that the group of "current employees" were more satisfied (or agree more strongly) than the group of "former employees". Conversely, when the difference in means is negative, it indicates that the group of "former employees" scored higher (are more satisfied or agree more strongly) than the group of "current employees".

As shown in Table 4.3, significant differences appeared in the answers to ten questionnaire items including questionnaire items II-3, II-4, II-6, III-7, III-13, III-14, III-15, and III-16. However, two questionnaire items, III-14 and III-15, were not considered in this study because it is not meaningful to compare the answers of employees who had already quit to the answers of current employees when the questions posed were: "I will be working at KFPC one year from now." and "I will be working at KFPC five years from now."

Therefore, a total of eight questionnaire items showed significant differences

between the two participant groups in this study.

**Group Comparisons Regarding Job Content And Work Environment** 

The results of the study in this section are organized according to the eight

dimensions of the questionnaire, i.e. employees' perceptions of (1) the

organizational context, (2) the opportunities for promotion and reward, (3) the

access to training, (4) the institutional rules and regulations, (5) the nature of the

work, (6) the supervisors, (7) the relationship with co-workers, as well as (8) the

organizational commitment.

The organizational context

In terms of homogeneity, this dimension was perhaps the broadest one, as it

included questionnaire items from a relatively wide range of the organizational

context, ranging from employee empowerment to aspects of ethnic diversity.

The results of the study indicated that the group of former employees

perceived issues related to the ethnic background of employees at KFPC as

more problematic than the group of current employees. Hence, it can be

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speculated that the issue of differential treatment of ethnic groups may have

contributed to the employees' decisions to quit their jobs. However, as the

questionnaire did not include information on ethnic background, statistical

principles do not support conclusions about specific problems related to

ethnicity.

With regard to employee orientation, somewhat surprisingly the group of

former employees were more satisfied than the group of current employees.

However, the very general contents of this particular questionnaire item

combined with the relatively difficult terminology may have imposed potential

limits on the interpretability of this result. Also from the results, the two

participant groups did not show a statistically significant difference on the

other issues related to the perception of the organizational context. This

means that the perception of the general efficiency of KFPC, communication

and empowerment are not likely to be substantially related to employee

turnover at KFPC.

The opportunities for promotion and reward

The results of the study indicated that the issue pertaining to the opportunities

for promotion and reward at KFPC demonstrated significant differences

between the two participant groups. That is, at KFPC, individuals who quit

indicated a stronger dissatisfaction with the chances for promotion, the

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institutional reward system and the recognition for hard work than individuals

who did not quit.

Many studies have found that reward and promotion opportunities are

important factors of job satisfaction that is closely related to employee

turnover (Herring, 1985; Gaudet, 1990; Martin, Price and Mueller, 1996). This

study affirms the importance of this factor. Hence, it appears that reward and

career advancement issues constitute a strong concomitant of job satisfaction

and, thus, employee turnover at KFPC. It is one of the main issues for KFPC

to address further.

The access to training

Regarding the issue of access to needed training at KFPC, surprisingly the

results showed significant differences between the current employees and

former employees at KFPC. It is worthy of note that individuals who quit

indicated higher satisfaction with their access to the training programs than

individuals who did not quit.

Several studies have indicated that the availability of training and educational

programs was an important factor in job satisfaction and staff turnover

behavior in the workplace (Reddy, 1996; Bartlett, 1999). In other words, lack

of access to training is likely to lead to higher levels of employee

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dissatisfaction and staff turnover. However, the results of this study did not confirm past research, but showed contrary findings. People who were more satisfied with their access to training programs were more likely to leave this institution. One likely reason could be that individuals who participated in training programs and were, thus, more likely to be satisfied with training opportunities, used this training to enhance their employment opportunity and job mobility. That is, these individuals were more likely to be successful in

## The institutional rules and regulations

their search for alternative employment.

In this dimension, the issue pertaining to the clarity of rules, regulations and policies at KFPC indicated significant differences between the two participant groups. It demonstrated that people who quit responded with stronger agreement that they clearly understood the institutional rules, regulations and policies than people who did not quit.

This finding indicated that individuals who quit have a more positive perception of the institutional operating procedures as compared to the group of participants who remained employed at KFPC. The literature addressing this topic is scarce. It is difficult to determine why the group of individuals who left demonstrated superior understanding of the rules and regulations as compared to the group of individuals who stayed. One likely reason which can

be inferred is that the group of individuals with greater understanding of the rules and regulations possessed higher levels of knowledge and skills, as well as mobility; and therefore, they enjoyed greater access to alternative employment or termination of employment by some individuals may have been voluntary.

#### The nature of the work

In this study, the results indicated that no significant difference existed between these two participant groups in relation to their satisfaction with the nature of work.

In contrast, previous studies have found that satisfaction with the nature of job content could be related to employee turnover; that is, increasing satisfaction with the nature of the tasks decreases turnover behavior (Schien, 1993; Hall, 1994; Walker, 1995; Edwards, 1996; Griffin, 1996; Campion, 1998; Spector, 2000). Still, the results from this study suggested that there were no significant differences between the two participant groups. This means that the perception of the nature of the work is not likely to be substantially related to employee turnover at KFPC.

## The supervisors

The relevant literature shows that employee satisfaction with their supervisors has been shown to be directly related to the overall job satisfaction and employee turnover. The results of this study confirmed this causal relationship.

The results of the study showed significant differences related to supervision at KFPC. The group of individuals who quit were less satisfied with their immediate supervisors in general than the group of individuals who remained employed. In particular, the former employees felt strongly that their supervisors failed to treat them with respect in contrast with the current employees. The relationship between staff members and their supervisors, both technical and personal, has been studied and has been found to be a major factor related to employee turnover in different industries (Grean, 1991; Woodman, 1995; Latham and Wexley, 1996; Fazio, 1999). In this study, the personal relationship between employees and their supervisors was found to be one of the key factors related to job satisfaction and staff turnover at KFPC.

The relationship with co-workers

The results of the study did not show a statistically significant difference

between the two participant groups in their perceptions of the relationship with

co-workers at KFPC.

Previous studies have indicated that the relationship between co-workers can

cause employee turnover behavior in the workplace (Muchinsky and Tuttle,

1994; Wanous, 1995). However, in this study, no significant difference

between the two participant groups was found in terms of the relationships

with co-workers at KFPC. Employees appeared to get along well with each

other and the relationship with colleagues appeared unrelated to turnover

behavior at KFPC.

The organizational commitment

In this dimension, although the two participant groups showed significant

differences in the perceptions of their future length of their tenure with KFPC,

the responses to the particular items were not being considered in this study

because it was not meaningful to compare the responses of former

employees who had already quit their jobs and the current employees who

stayed. In addition to the length of tenure, the "pride" and the "effort"

measurements in this dimension did not demonstrate a statistically significant

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difference. Therefore, the results of the study confirmed that no significant differences were found regarding the perceptions of the organizational

commitment at KFPC.

**Emergent Patterns Of Turnover Behavior** 

At Kirby Forensic Psychiatric Center (KFPC), the results of the study showed

significant differences between participant groups on several questionnaire

items. The former employees expressed greater dissatisfaction than the current

employees with regard to the following aspects of their jobs: (1) opportunities for

advancement, (2) their immediate supervisor, (3) the notion that hard work is

rewarded and appreciated and (4) the level of acceptance within the organization

concerning people from diverse cultural backgrounds. Additionally, there were

some seeming anomalies in the findings. The former employees were more

satisfied than the current employees with the following aspects of their jobs: (1)

access to needed training, (2) the adequacy of employee orientation and (3) the

clarity of rules and regulations at KFPC.

By integrating the findings presented above, it appears that there is a pattern of

correlation between job satisfaction and employee turnover at KFPC. When

individuals are dissatisfied with regard to their supervisors and frustrated by the

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perception of a low level of acceptance of their cultural background throughout

the entire institution at KFPC, they begin to search for alternative employment

elsewhere. If simultaneously, they enjoy opportunities to access various training

programs to strengthen their skills and knowledge, and through experience or

knowledge they arrive at an understanding that the institutional rules and

regulations will not favorably affect their chances of reward and promotion, they

are most likely to have a successful job search and leave KFPC for a better

opportunity elsewhere.

In addition, this study revealed that there was a measurable consistency by

department in responses to virtually every questionnaire item by these two

participant groups. That is, for instance, when the group of former employees in

the Department of Psychology scored lower than average on the questionnaire

item II-1 compared to the other departments of former employees, the group of

current employees in this department also scored lower than the average on the

same questionnaire item among others (See Appendixes G and H).

Furthermore, by examining each dimension ranked by different departments and

professions, individuals in certain departments and professions demonstrated

more dissatisfaction than the other departments and professions in different

dimensions. It is also fair to say that, based on the results of the study, several

patterns were found among individuals in different departments and professions.

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These patterns can be explained as the likely result of job dissatisfaction leading

to employee turnover behavior at KFPC.

First, regarding opportunities for promotion and reward and the acceptance of

people from diverse cultural backgrounds, it appears that the Departments of

Nursing and Social Work showed significantly lower scores than the average.

Therefore, it appears that the promotion and reward system at KFPC does not

favor individuals in these two departments. In addition, acceptance of diversity in

these departments require further study.

Second, regarding relationship with supervisors, the Department of Psychology

demonstrated significant dissatisfaction compared to the other departments. This

finding may indicate that the supervision in this department may not be

recognized and appreciated by individuals in this department. Thus, it appears

that the quality of supervision in the Department of Psychology needs attention.

Third, regarding access to needed training, it was evident that the Department of

Safety received a significantly lower score than the other departments. As

previous statement, KFPC was established to serve and isolate patients requiring

forensic evaluations and care under maximum-security conditions in the State of

New York. Safety-related issues are very important in this high-secured mental

hospital, in particular as it relates to specific groups of staff who deal directly with

the patients. Base on the findings, it appears that KFPC has emphasized its

training programs in certain areas; such as medicine, psychology and healthcare; however, it has provided less safety-related training. Therefore, this finding may

indicate that safety-related training programs should be enhanced at KFPC.

The Effectiveness Of The Survey Instrument

Based on the findings of significant differences demonstrated from the data

obtained from the two participant groups - current employees and former

employees at Kirby Forensic Psychiatric Center (KFPC) - it can be postulated

that the employee job satisfaction survey provided valid information for identifying

the relevant factors that influence employee turnover behavior. Although the

questionnaire used in this study, the 1999 Kirby Forensic Psychiatric Center Staff

Workplace Survey, was not developed particularly for this study and it employed

arbitrary scales, the results indicated that it is an adequate instrument to identify

similarities and differences with regard to various aspects of job satisfaction.

In general, and not surprisingly, the group of participants who terminated their

employment at KFPC in the year of 1999 showed lower levels of job satisfaction

than the group of participants who remained employed at KFPC in 1999. It can

be concluded that the participants who quit in 1999 felt less satisfied about key

elements of their jobs; that is, they were more dissatisfied or expressed more

disagreement than the participants who did not quit by the end of 1999 as

indicated by their questionnaire responses. From a different perspective, the

participants who remained at KFPC demonstrated more satisfaction, i.e. more

agreement to items presented in the questionnaire than the participants who quit.

The measured level of satisfaction or dissatisfaction was evidenced by the

participants' responses to items on the questionnaire. The results of the study

confirmed the observation of high turnover rate at KFPC and its relationship to

the staff dissatisfaction in the workplace environment. The results also provided

evidence to confirm the assumptions of the institution of the relationship between

job satisfaction and staff turnover in different dimensions which reflected the

previous literature.

This was a case study that compared the responses of the two participant groups

to the annual staff survey instrument used by KFPC. Despite the small overall

sample size used in this study, and in particular the small size of the group of

participants who terminated employment at KFPC in the year of 1999, the results

still indicated significant differences between the two participant groups on

several factors of job satisfaction. Thus, the results demonstrated the instrument

used in this study to be effective.

There are four limitations surrounding the issues of sample size, instrument,

potential response duplication, and time lapse problem in this research. Some

possible remedies are discussed below.

First, the findings of this study are based on a relatively small overall sample size

which included 252 participants, out of a total of 324, representing the group of

current employees in 1999 and 40 individuals, out of a total of 117, representing

the group of employees who terminated their employment during the year of

1999. It is also noted that the response rate of the former employees (34.19%)

was low.

Second, the psychometric value of the questionnaire used in this study was

slightly limited. Several important categories were not covered, such as based

pay and benefits. In addition, the questionnaire did not provide the information on

whether the former employees voluntarily or involuntarily quit their jobs during the

year of 1999. Furthermore, only two of the four Sections of the questionnaire

were used in this study. This selection of only two sections of the questionnaire

may have maybe contaminated the validity of the survey instrument.

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Third, as the questionnaire was administered anonymously, it was not possible to

identify each respondent individually from the participant groups. Therefore, while

comparisons were made between these two participant groups, there was a

limitation in that certain individuals may have filled out the questionnaire twice.

For example, if an individual completed the questionnaire for the annual staff

survey in January of 1999, as a current employee, then terminated employment

in July of 1999, he/she would have been requested to complete a second

questionnaire as a former employee in August of 1999, and would thus have

been included in this study twice. Because of the anonymous questionnaire

distribution process, there was no way to be certain whether any individuals were

counted twice in this manner. The statistical implications of this limitation are

discussed in Chapter 3.

Four, as all former employees who had left the institution during the course of

1999 were given the questionnaire at one particular point in time, the time

difference between the time of exit and the time of filling out the questionnaire

varied from a few days to almost one year, with potential repercussions on the

accuracy of data and comparability within the group of former employees.

#### CHAPTER 5

#### RECOMMENDATIONS FOR WORKPLACE IMPROVEMENT

#### Introduction

This study was a comparative analysis of job satisfaction of current and former employees as a basis for better understanding and improving employee turnover at Kirby Forensic Psychiatric Center (KFPC). This was the first study to address the staff workplace behavior and institutional problems at KFPC.

Employee survey feedback is one of the most widely used organizational development techniques. It focuses primarily on employee attitudes and beliefs. This strategy always involves three basic steps: first, the data collection; second, the feedback presentation; and third, the development of an action plan — a plan for overcoming identified problems and making improvements. In other words, after data collection, feedback meeting(s) and specific problem identification, specific action plans should be developed to make the necessary improvements. However, at KFPC, it seems clear that the final step in this three-step process is missing.

The institution conducts an employee workplace survey every year. A presentation of the results is made at in the end of the survey. However, there

appears no efforts to further intervene to solve those problem identified and presented. The results of the survey could well lead to developing and implementing intervention strategies for improving job satisfaction and thus reducing employee tenure problems in the institution. Therefore, this study suggests the development of a clear action plan, based on the results of the annual employee satisfaction survey and the issues raised during the feedback session(s), which will include several overall organizational change exercises.

This chapter particularly focuses on a general and practical recommendations for KFPC. These recommendations are based not only on the empirical findings which are linked to existing research in the area of job satisfaction and employee turnover, but also the overall improvement of the organizational culture and change management in the institution. From the experience of the study, it is evident that there is no responsible team designed to undertake the functions of organizational development and change at KFPC. In addition, it is argued here that targeted interventions on the part of management are very likely to reduce employee turnover at KFPC. Therefore, this chapter presents recommendations for an action plan of the institution, which includes three steps: (1) development of an executive team, (2) implementation of organizational development programs, and (3) evaluation of the feedback and the results of the programs.

#### The Action Plan

# Development of an executive team

As mentioned above, this study suggests the development of a clear action plan. However, a responsible team to design and implement an action plan is critical and it appears to be missing at Kirby Forensic Psychiatric Center (KFPC). It is suggested that the KFPC appoint an executive team to design, implement and evaluate a plan for organizational development and change in the institution.

Such an executive team should be composed of managers and staff representatives from the various departments and levels in the institution to interpret the annual staff survey findings and provide an improvement plan, as well as to further implement programs related to the overall organizational development and change in this institution. External consultants to be included in the executive team also can be considered. The involvement of staff representatives should provide not only for enhanced focus, but also for maximum commitment towards the suggested measures. Both operative employees and managers at the institution could benefit from the survey results and organizational development programs.

#### Implementation of organizational development programs

A primary recommendation emanating from this study is to design and implement organizational development programs within Kirby Forensic Psychiatric Center (KFPC). According to previous studies, organizations make organizational changes through the development of different programs to assess the strength and weakness of the institution, to address the problems, and to further improve the quality of work. In addition, these inhouse programs can further encourage individuals within the institution to participate in different activities to which they would not ordinarily be exposed.

Based on the results of the study, it is certainly important to design, implement and evaluate programs to solve the existing problems. This study suggests that KFPC improve the communication patterns and create more communication opportunities among staff members and between operative employees and managers in this institution, in particular in areas found to be problematic. Primary efforts should be directed toward the management of cultural differences that were perceived to be significantly more problematic by the group of former employees. One program that has been successfully implemented at other institutions include regular, monthly or bi-weekly staff meetings, or even irregular workshops focusing on various topics, such as "Cultural Sensitivity" training as needed. The meetings and/or workshops can be structured formally or informally. The purpose of the program, including

various meetings and workshops, is to allow individuals more opportunities to communicate with their colleagues and supervisors. Such program could also create more chances for individuals to express themselves and to understand each other in the institution. On the other hand, the program could offer opportunities for supervisors to recognize staff members' contributions and praise them for their hard work. By doing so, it is likely that relationships between supervisors and staff members will improve. At the same time, the program might be a powerful tool to communicate organizational issues. This study suggests that proper implementation is likely to increase productivity and decrease employee turnover.

In addition, one of the most straightforward insights from this study is that the institution would benefit from a rewards system and more clearly defined promotion opportunities. Therefore, it is recommended that the institution implement an appropriate rewards system and a career advancement opportunity program for staff members. A program that focuses on the development of an incentive package could help improve employees' sense of satisfaction. Incentives cover a spectrum from simple recognition such as "Employee of the Month" schemes to monetary or non-monetary rewards. Introducing performance-based reward schemes is not an easy enterprise. However, both academic research and current practice indicate that it is likely to improve employee satisfaction as well as productivity. Such a reward system is particularly warranted at KFPC, as the results of this study

suggested that the lack of an adequate reward scheme is one of the reasons for the high level of employee turnover in this institution. These suggestions could, in turn, have positive effects in many other work environment areas. There could be improvement in employee-employer relationships, and improvement in the overall morale of the work environment, as well as an increase in overall productivity.

In addition to the programs mentioned above, there are several programs to be suggested in order to improve the overall institutional workplace environment. These programs have been successfully implemented in various industries and organizations, and could be applied at KFPC. Quality of Work Life programs (QWL), which are designed to empower employees and create a more friendly, humane work environment with workers setting their own production goals and assuming decision-making responsibility. Total Quality Management (TQM) and Quality Circles (QC) programs, which are designed to gather voluntary groups trained in problem-solving processes used to restructure organizations, can also be considered. Some facilities use a social-technical approach, adopting a system's perspective. There is Grid Training (GT), which targets the formal organization using seminar training, goal-setting, goal attainment and critique and evaluation (with a concern for both production and people). These programs aim to enhance individual development and to improve organizational performance through the alteration of organizational members' on-the-job behavior and work settings.

#### Evaluation of the feedback and the results of the programs

It is important to review and to evaluate the feedback from the implemented programs. This study indicated that although Kirby Forensic Psychiatric Center (KFPC) conducts the staff survey every year, it seems clear that a plan for overcoming identified problems and making the workplace improvements is missing. This study suggests developing an executive team to design, implement and evaluate the organizational development action plan. The team may be composed of internal staff members and/or external consultants. Based on the feedback from the current annual staff survey, as well as on-going and/or new organizational development programs, this team is responsible for evaluating the outcomes and making necessary adjustments to ensure the staff survey and the programs are effectively implemented.

#### **CHAPTER 6**

### SUMMARY, RECOMMENDATIONS AND CONCLUSIONS

### **Summary Of The Study**

This research was conducted to address the issues of job satisfaction and employee turnover problems at Kirby Forensic Psychiatric Center (KFPC) in the State of New York, located in New York City. The Kirby Forensic Psychiatric Center (KFPC) is one of the maximum security psychiatric hospitals in the State of New York that serves and isolates patients requiring forensic evaluations and care in the New York City metropolitan area. It is easy to imagine that there are many specific factors that may be related to job stress and satisfaction in this type of setting.

Based on the institutional records (See Tables 3.1, 3.2 and 3.3 and Appendix A), it is generally understood that a staff tenure problem exists at KFPC. With this realization, this study sought to narrow the focus of the employee turnover problem at KFPC by using an employee job satisfaction questionnaire as a tool to further answer the following questions: (1) "Is there a measurable pattern of job satisfaction that corresponds with employee turnover at Kirby Forensic Psychiatric Center?" and (2) "Does this pattern indicate that employees who are

less satisfied with certain aspects of their jobs are more likely to leave the

institution?"

The 1999 Kirby Forensic Psychiatric Center Staff Workplace Survey was utilized

in this study to explore and determine the relationship between job satisfaction

and employee turnover at KFPC. There were two groups of participants in this

study. One group consisted of the total of 324 current employees at KFPC in

1999, of whom 252 replied. The other group consisted of a total of 117 former

staff members who terminated their employment during the year of 1999, of

whom 40 replied (See Table 4.1). Similarities and differences between the two

participant groups on various aspects of job satisfaction were determined. T-tests

were used to determine differences in means between the two participant groups

(See Tables 4.2 and 4.3 and Appendixes G, H and I).

The significant differences between these two participant group responses on a

number of questionnaire items which related to the jobs and the workplace

environment at KFPC were discussed in this study.

In this study, responses relating to the job were requested and measured by

several questionnaire items in the survey. However, the findings indicated there

were no significant differences with regard to overall job enjoyment between

these two participant groups (i.e. former employees and current employees).

Theories have indicated that people who do not like their jobs will try to find

alternative employment (e.g. Spector, 2000). However, this study suggests that

the relationship between job satisfaction and employee turnover is more

complex, and involves a number specific aspects of job satisfaction rather than

job satisfaction as a composite.

Overall job satisfaction involves several factors which include job content,

workload, stress, shift, pay, and benefit. In different cases, depending on job

expectations, individuals define their job satisfaction considering various factors

in different degrees. The survey instrument used in this study was not designed

and developed particularly for this study and there are several important issues

that did not appear in the questionnaire. Therefore, it is suggested here that

further research include a more complete job satisfaction survey. The results of

such a study will help to determine which factors of job satisfaction are the most

important in influencing the employees' decision to leave their jobs.

There are several areas related to the workplace environment at KFPC that

indicated significant differences, both negative and positive, between the two

participant groups.

Regarding the significant negative differences, first, employees who left KFPC

felt less positive about job advancement possibilities as well as their receiving

rewards for hard work. These two factors seem to be connected. Individuals who

perceive themselves to work hard without either adequate rewards or career

advancement opportunities look for employment alternatives. Different studies have found significant negative correlations related to this issue (e.g. Gaudet, 1990). At KFPC, this study was the first to discover the evidence that perception of an inadequate reward system and career advancement opportunity at KFPC could be related to the employee turnover problem. On the basis of this, it may be necessary for management of KFPC to introduce a performance-based reward system. Such a system may have positive effects not only for job satisfaction and employee turnover, but also overall organizational effectiveness. This study also suggests that it would be important to provide more opportunities for career advancement of qualified in-house candidates.

Second, the findings revealed significant differences in satisfaction with the supervisors of former and current employees at KFPC. In particular, the group of former employees was less satisfied with their supervisor. They felt they were treated with less respect from their supervisors than employees who remained employed at KFPC. These findings point to potential weaknesses in the quality of supervision as one of the key factors linked to the employee turnover problem at KFPC. Manager-staff relationships have been emphasized in many previous studies as an important factor in staff tenure (e.g. Price, 1992). People who feel uncomfortable or less respected, particularly by their direct supervisors, are more likely to leave the organization. At KFPC, this finding also confirmed the perception of a lack of respect for employees in certain instances. This perception may be linked to job dissatisfaction and staff turnover.

Third, a significant difference was found in the responses relating to the

acceptance of people from diverse cultural backgrounds within the institution.

The results indicated that former employees who quit felt less sure about the

notion that individuals with diverse cultural backgrounds were well accepted at

KFPC. From previous studies, diversity issues have become an important lesson

to study, as they have significant repercussions on overall organizational

effectiveness (e.g. Mobley, 1997). Based on the finding from this study, it

appears evident that acceptance of cultural diversity may be a potential problem

at KFPC and the institutional communication and cultural reorganization may

require additional emphasis and focus.

In sum, the results suggest that further considerations of problematic

employment conditions are required, such as improving the reward and career

advancement systems, improving the managers' supervisory skills, improving

diversity acceptance training, and improving the communication strategies within

the institution.

As mentioned above, in addition to the expected pattern of former employees

being less satisfied with a number of factors related to their jobs, somewhat

surprisingly, a number of rather unexpected reverse differences was detected.

These are summarized in the following sections.

The research findings demonstrated that the group of former employees was more satisfied with their access to training than the group of employees who remained employed at KFPC. Although several studies have indicated that the availability of training and educational programs was an important and positive factor in job satisfaction and staff turnover behavior in the workplace (e.g. Bartlett, 1999), this finding was not replicated in this study. However, it is possible to speculate that respondents who benefited from KFPC's training programs and subsequently terminated employment developed a higher expectation for further career advancement which might also have resulted in less satisfactory views on perceived available opportunities of career advancement at KFPC. This speculation suggests that the provision for training opportunities may actually be counter-productive with respect to employee turnover. Consequently, it may be necessary to weigh carefully the training needs of the institution. On the other hand, although the overall satisfaction results supported access to training at KFPC, it was evident that the Department of Safety responded significantly lower than the average. That is, the safetyrelated training at KFPC is somewhat limited. Therefore, the quality and quantity of safety-related training needs to be improved in the institution.

Another significant difference recognized from the findings appears in relation to the perception of whether or not policies and regulations are clear and understandable. Former employees indicated greater satisfaction about their understanding of the policies and regulations at KFPC than the employees who

did not quit. This seems to suggest that the former employees who showed the

greatest understanding of, and respect for, regulations and rules were among

those who left the institution. This is an unexpected finding, as it suggests that

individuals who show the most favorable behavior in that respect are the most

successful in leaving the institution. A further analysis of disciplinary actions for

violating rules at KFPC may provide further insight. With this information, a

comparison between these two participant groups would be critical to further

understand what this positive correlation between employees who quit and

increased satisfaction about understanding rules is based on.

Based on the findings of the study, it can be confirmed that job dissatisfaction

consistently demonstrated a significant relationship with employee intention to

quit. In addition, the findings warrant further discussion of employee job

satisfaction/dissatisfaction and its effects on employee turnover at KFPC.

Recommendations For Future Research

There are four recommendations for further study in this field, including the

technical considerations of conducting a survey, further investigation of

significant factors, analyzing a wider range of potential factors, and expanding

the use of demographics in the questionnaire.

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### Technical considerations of conducting a survey

In this study, an employee job satisfaction questionnaire was administered to all employees of Kirby Forensic Psychiatric Center (KFPC) in 1999. The other group of people surveyed consisted of those employees who guit their jobs in 1999. As indicated in the limitations of this study, some participants possibly filled out the questionnaire twice and were included in each participant group. For example, some participants were surveyed in January 1999 when they were employed at KFPC and later terminated their employment from KFPC in the middle of 1999 may have completed the questionnaire again as a former employee. This limitation can be prevented by using a specific code for each individual, such as the last four digital of each individual's Social Security Number, to identify the participants and, thus, prevent the same individual from being included in both participant groups. Such a technique would, at the same time, allow for individual comparisons of employees who have left the institution. For example, it would be possible to identify what perceptions have changed since the individual left the job and which ones remained stable. In addition. outsourcing the survey instrument implementation administration to external experts and professions may be a great asset to provide a fair and more completed staff tenure research.

Further investigation of significant factors

The results of the study indicated several employment satisfaction issues,

such as the quality of supervision, respectful treatment of employees by

supervisors, and the acceptance of cultural diversity within Kirby Forensic

Psychiatric Center (KFPC). These perceptions of negative supervisory

relationships and negative cultural considerations suggest the need for

deeper exploration. A starting point would be to obtain information about the

respondents' specific cultural background and to understand in clearer detail

how respondents and supervisors define respect. This information could be

an important step in correcting the more negative perceptions of relationships

between supervisors and employees who have terminated employment at

KFPC. Such further investigation could be carried out by means of a more

specific questionnaire, or, preferably, interviews with representatives from

both groups, current and former employees. It would also be helpful to know

the ethnicity of those who quit and if their terminations were voluntary or

involuntary.

Analyzing a wider range of potential factors

As discussed above, the questionnaire used in this study was developed by

Kirby Forensic Psychiatric Center (KFPC) itself and lacks a number of

potentially important factors in considering employee satisfaction and

turnover. Future research in the area of job satisfaction and employee turnover should include further analysis of underlying differences in perceptions of the work environment. At KFPC, this would help the facility to better understand the reasons for employee dissatisfaction and turnover.

For instance, studies have demonstrated that work schedules as well as shifts (day, evening, and night) are two important factors related to job satisfaction and staff turnover (laffaldano and Muchinsky, 1990). Investigating in greater detail the differences in perceptions among groups who work different shifts could be a topic for future research. In addition, the information gathered from the questionnaire, such as gender and department, is available and could also provide further information for future research. What role gender might play in responses and perceptions about the work environment, which ultimately result in employee termination could be studied to offer valuable considerations to correct the high employee turnover rate at KFPC. Additionally, how employees from particular departments responded could be compared, to determine which departments perceive less satisfaction with the job environment. However, in the present study, such comparisons were impossible due to the relevantly small sample size, which did not allow for analyses at the department level.

### Expanding the use of demographics in the questionnaire

Related to the former point, the range of demographics to be included in the questionnaire could be expanded. The respondent's age is an example. Research has shown that job satisfaction increases with age (Porter, 1990). A specific question that could be considered is: "Whether there is a significant difference between the satisfaction of younger and older employees", as Porter (1990) suggests. If so, specialized training and incentive programs could be targeted to those more likely to become dissatisfied, especially in this case younger and newer employees. Furthermore, the link between age and turnover could be investigated.

Research has also shown that younger workers expect more personal fulfillment from their jobs and opportunities for advancement (Schein, 1993). To test whether the results of the survey replicate this age trend among employees at Kirby Forensic Psychiatric Center (KFPC), gathering further demographic information would be warranted. With this additional information, a more complete intervention could be included to consider the question of how KFPC could direct its resources to address these employee needs. Inhouse training or in-house educational opportunities linked to community or four-year colleges might be a possibility. However, before engaging in this kind of program, the relationship between age and satisfaction about training

opportunities should be investigated, especially as the latter has proven to

show an unexpected pattern in this study.

The educational level of employees is another factor to

investigate in the analysis of job satisfaction and employee turnover (Steers

and Mowday, 1996). Employees who have a high level of education or skill

have a tendency to be more dissatisfied with their jobs. As the questionnaire

did not include questions on educational background, it was not possible to

determine whether this variable may have had a mediating effect. With further

study, this possible mediating effect could be important to analyze as the

educational levels of employees at KFPC ranges from high school to doctoral

degree.

Conclusions

To conclude, the results of this study clearly indicated significant

relationships between job satisfaction and employee turnover at Kirby Forensic

Psychiatric Center (KFPC). The study confirmed the effectiveness of the survey

instrument which is used in the annual staff workplace survey at KFPC. In

addition, the results of the study generally confirmed the previous professional

literature in employee job satisfaction and turnover. With these findings,

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intervention strategies at KFPC could be further explored to reduce the problematic high employee turnover rate in the institution. While there were limitations to the study, it identified the need for further investigations to address the numerous questions that the findings in the study raised surrounding the complex relationships between job satisfaction and employee turnover. This study provided valuable contribution in particular personnel practitioners/planners in mental health institutions. Personnel decisions based on the results and recommendations for empirical research not only benefit human resources managers but also greatly improve the workplace environment and, thus, the quality of life for both mental health care staff members and the psychological patients as well. Furthermore, the study confirmed that further information is necessary to move forward and address the organizational development issues at KFPC linked to job satisfaction and employee turnover, as well as the overall organizational culture. As KFPC becomes a more costeffective state institution, society in general and tax payers in particular will also be the benefactors.

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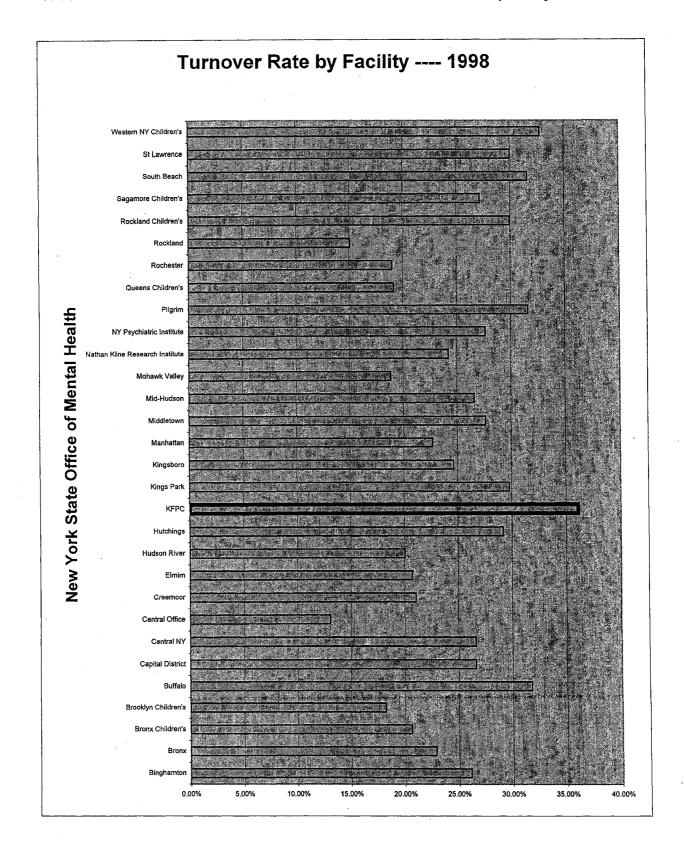
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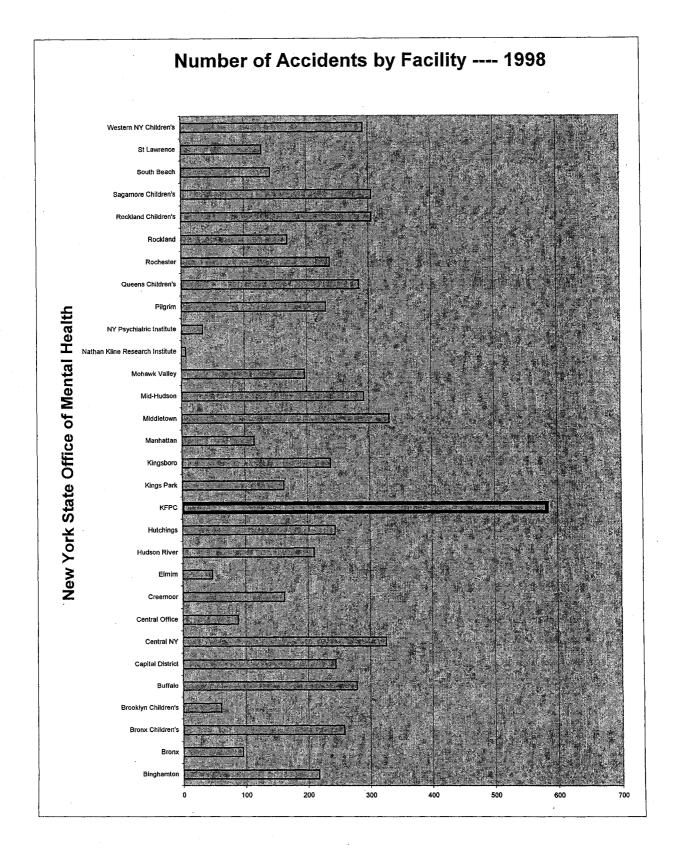
# **Appendixes**

# Appendix A

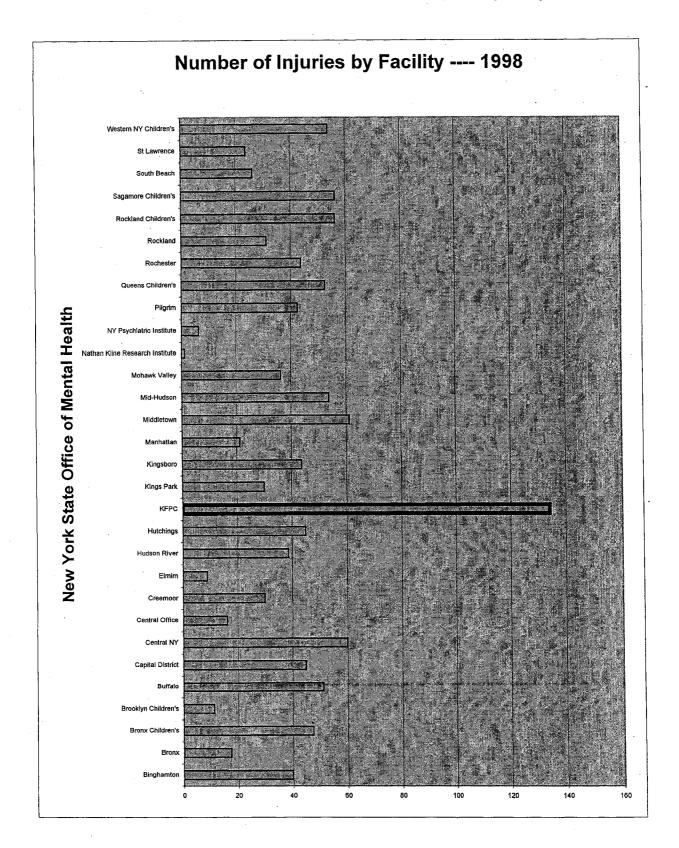
1998 New York State Office Of Mental Health Staff Tenure Reports

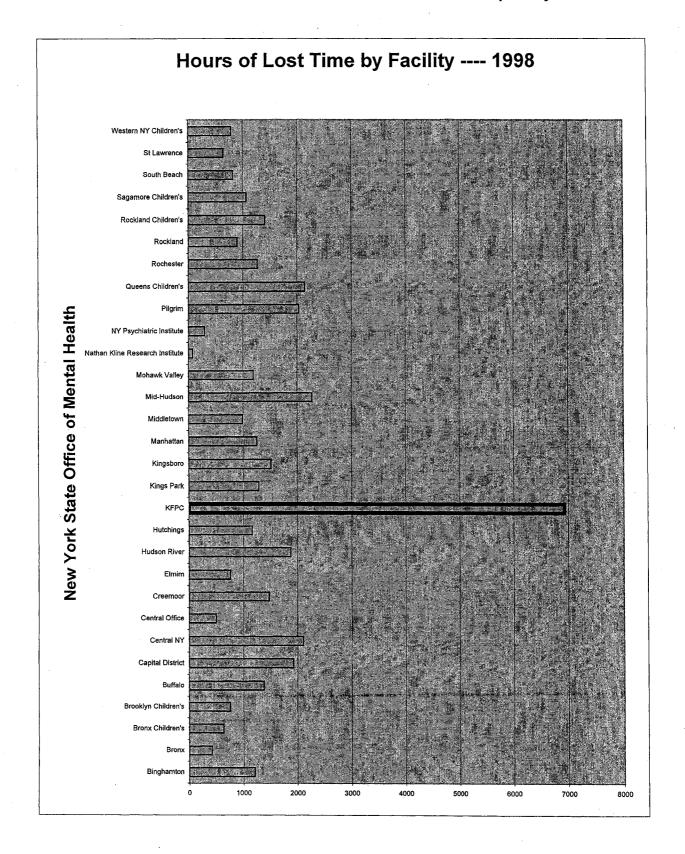


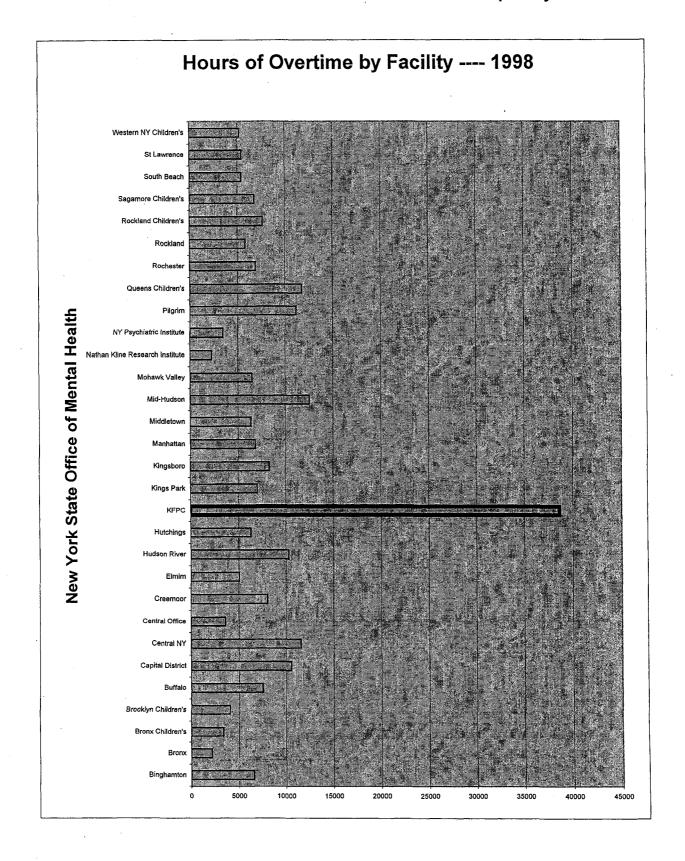
# 1998 New York State Office of Mental Health Staff Tenure Report by facilities



# 1998 New York State Office of Mental Health Staff Tenure Report by facilities







# Appendix B

**Relevant Portions of the Criminal Procedure Law** 

#### FindLaw: FindLaw New York: Codes and Statutes: New York Consolidated Law: Criminal Procedure

## New York State Consolidated Laws

#### o Criminal Procedure

# ARTICLE 330-PROCEEDINGS FROM VERDICT TO SENTENCE

#### Section

- 330.10 Disposition of defendant after verdict of acquittal.
- 330.20 Procedure following verdict or plea of not responsible by reason of mental disease or defect.
- 330.25 Removal after verdict.
- 330.30 Motion to set aside verdict; grounds for.
- 330.40 Motion to set aside verdict; procedure.
- 330.50 Motion to set aside verdict; order granting motion.
- Sec. 330.10 Disposition of defendant after verdict of acquittal.
- 1. Upon a verdict of complete acquittal, the court must immediately discharge the defendant if he is in the custody of the sheriff, or, if he is at liberty on bail, it must exonerate the bail.
- 2. Upon a verdict of not responsible by reason of mental disease or defect, the provisions of section 330.20 of this chapter shall govern all subsequent proceedings against the defendant.
- S 330.20 Procedure following verdict or plea of not responsible by reason of mental disease or defect.
  - 1. Definition of terms. As used in this section, the following terms

shall have the following meanings:

- (a) "Commissioner" means the state commissioner of mental health or the state commissioner of mental retardation and developmental disability.
- (b) "Secure facility" means a facility within the state office of mental health or the state office of mental retardation and developmental disabilities which is staffed with personnel adequately trained in security methods and is so equipped as to minimize the risk or danger of escapes, and which has been so specifically designated by the commissioner.
- (c) "Dangerous mental disorder" means: (i) that a defendant currently suffers from a "mental illness" as that term is defined in subdivision twenty of section 1.03 of the mental hygiene law, and (ii) that because of such condition he currently constitutes a physical danger to himself or others.
- (d) "Mentally ill" means that a defendant currently suffers from a mental illness for which care and treatment as a patient, in the in-patient services of a psychiatric center under the jurisdiction of the state office of mental health, is essential to such defendant's welfare and that his judgment is so impaired that he is unable to understand the need for such care and treatment; and, where a defendant is mentally retarded, the term "mentally ill" shall also mean, for purposes of this section, that the defendant is in need of care and treatment as a resident in the in-patient services of a developmental center or other residential facility for the mentally retarded and developmentally disabled under the jurisdiction of the state office of mental retardation and developmental disabilities.
- (e) "Examination order" means an order directed to the commissioner requiring that a defendant submit to a psychiatric examination to determine whether the defendant has a dangerous mental disorder, or if he does not have dangerous mental disorder, whether he is mentally ill.
- (f) "Commitment order" or "recommitment order" means an order committing a defendant to the custody of the commissioner for confinement in a secure facility for care and treatment for six months from the date of the order.
- (g) "First retention order" means an order which is effective at the expiration of the period prescribed in a commitment order for a recommitment order, authorizing continued custody of a defendant by the commissioner for a period not to exceed one year.
- (h) "Second retention order" means an order which is effective at the expiration of the period prescribed in a first retention order,

authorizing continued custody of a defendant by the commissioner for a period not to exceed two years.

- (i) "Subsequent retention order" means an order which is effective at the expiration of the period prescribed in a second retention order or a prior subsequent retention order authorizing continued custody of a defendant by the commissioner for a period not to exceed two years.
- (j) "Retention order" means a first retention order, a second retention order or a subsequent retention order.
- (k) "Furlough order" means an order directing the commissioner to allow a defendant in confinement pursuant to a commitment order, recommitment order or retention order to temporarily leave the facility for a period not exceeding fourteen days, either with or without the constant supervision of one or more employees of the facility.
- (1) "Transfer order" means an order directing the commissioner to transfer a defendant from a secure facility to a non-secure facility under the jurisdiction of the commissioner or to any non-secure facility designated by the commissioner.
- (m) "Release order" means an order directing the commissioner to terminate a defendant's in-patient status without terminating the commissioner's responsibility for the defendant.
- (n) "Discharge order" means an order terminating an order of conditions or unconditionally discharging a defendant from supervision under the provisions of this section.
- (o) "Order of conditions" means an order directing a defendant to comply with this prescribed treatment plan, or any other condition which the court determines to be reasonably necessary or appropriate, and, in addition, where a defendant is in custody of the commissioner, not to leave the facility without authorization. The order shall be valid for five years from the date of its issuance, except that, for good cause shown, the court may extend the period for an additional five years.
- (p) "District attorney" means the office which prosecuted the criminal action resulting in the verdict or plea of not responsible by reason of mental disease or defect.
- (q) "Qualified psychiatrist" means a physician who (i) is a diplomate of the American board of psychiatry and neurology or is eligible to be certified by that board; or (ii) is certified by the American osteopathic board of neurology and psychiatry or is eligible to be certified by that board.
- (r) "Licensed psychologist" means a person who is registered as a psychologist under article one hundred fifty-three of the education law.
  - (s) "Psychiatric examiner" means a qualified psychiatrist or a

licensed psychologist who has been designated by the commissioner to examine a defendant pursuant to this section, and such designee need not be an employee of the department of mental hygiene.

- 2. Examination order; psychiatric examiners. Upon entry of a verdict of not responsible by reason of mental disease or defect, or upon the acceptance of a plea of not responsible by reason of mental disease or defect, the court must immediately issue an examination order. Upon receipt of such order, the commissioner must designate two qualified psychiatric examiners to conduct the examination to examine the defendant. In conducting their examination, the psychiatric examiners may employ any method which is accepted by the medical profession for the examination of persons alleged to be suffering from a dangerous mental disorder or to be mentally ill or retarded. The court may authorize a psychiatrist or psychologist retained by a defendant to be present at such examination. The clerk of the court must promptly forward a copy of the examination order to the mental hygiene legal service and such service may thereafter participate in all subsequent proceedings under this section.
- Examination order; place of examination. Upon issuing an examination order, the court must, except as otherwise provided in this subdivision, direct that the defendant be committed to a secure facility designated by the commissioner as the place for such psychiatric examination. The sheriff must hold the defendant in custody pending such designation by the commissioner, and when notified of the designation, the sheriff must promptly deliver the defendant to such secure facility. When the defendant is not in custody at the time of such verdict or plea, because he was previously released on bail or on his own recognizance, the court, in its discretion, may direct that such examination be conducted on an out-patient basis, and at such time and place as the commissioner shall designate. If, however, the commissioner informs the court that confinement of the defendant is necessary for an effective examination, the court must direct that the defendant be confined in a facility designated by the commissioner until the examination is completed.
- 4. Examination order, duration. Confinement in a secure facility pursuant to an examination order shall be for a period not exceeding thirty days, except that, upon application of the commissioner, the court may authorize confinement for an additional period not exceeding thirty days when a longer period is necessary to complete the examination. If the initial hearing required by subdivision six of this section has not commenced prior to the termination of such examination

period, the commissioner shall retain custody of the defendant in such secure facility until custody is transferred to the sheriff in the manner prescribed in subdivision six of this section. During the period of such confinement, the physician in charge of the facility may administer or cause to be administered to the defendant such emergency psychiatric, medical or other therapeutic treatment as in his judgment should be administered. If the court has directed that the examination be conducted on an out-patient basis, the examination shall be completed within thirty days after the defendant has first reported to the place designated by the commissioner, except that, upon application of the commissioner, the court may extend such period for a reasonable time if a longer period is necessary to complete the examination.

- 5. Examination order; reports. After he has completed his examination of the defendant, each psychiatric examiner must promptly prepare a report of his findings and evaluation concerning the defendant's mental condition, and submit such report to the commissioner. If the psychiatric examiners differ in their opinion as to whether the defendant is mentally ill or is suffering from a dangerous mental disorder, the commissioner must designate another psychiatric examiner to examine the defendant. Upon receipt of the examination reports, the commissioner must submit them to the court that issued the examination order. If the court is not satisfied with the findings of these psychiatric examiners, the court may designate one or more additional psychiatric examiners pursuant to subdivision fifteen of this section. The court must furnish a copy of the reports to the district attorney, counsel for the defendant and the mental hygiene legal service.
- 6. Initial hearing; commitment order. After the examination reports are submitted, the court must, within ten days of the receipt of such reports, conduct an initial hearing to determine the defendant's present mental condition. If the defendant is in the custody of the commissioner pursuant to an examination order, the court must direct the sheriff to obtain custody of the defendant from the commissioner and to confine the defendant pending further order of the court, except that the court may direct the sheriff to confine the defendant in an institution located near the place where the court sits if that institution has been designated by the commissioner as suitable for the temporary and secure detention of mentally disabled persons. At such initial hearing, the district attorney must establish to the satisfaction of the court that the defendant has a dangerous mental disorder or is mentally ill. If the court finds that the defendant has a dangerous mental disorder, it must issue a commitment order. If the court finds that the defendant does not

- have a dangerous mental disorder but is mentally ill, the provisions of subdivision seven of this section shall apply.
  - 7. Initial hearing civil commitment and order of conditions. If, at the conclusion of the initial hearing conducted pursuant to subdivision six of this section, the court finds that the defendant is mentally ill but does not have a dangerous mental disorder, the provisions of articles nine or fifteen of the mental hygiene law shall apply at that stage of the proceedings and at all subsequent proceedings. Having found that the defendant is mentally ill, the court must issue an order of conditions and an order committing the defendant to the custody of the commissioner. The latter order shall be deemed an order made pursuant to the mental hygiene law and not pursuant to this section, and further retention, conditional release or discharge of such defendant shall be in accordance with the provisions of the mental hygiene law. If, at the conclusion of the initial hearing, the court finds that the defendant does not have a dangerous mental disorder and is not mentally ill, the court must discharge the defendant either unconditionally or subject to an order of conditions.
  - 8. First retention order. When a defendant is in the custody of the commissioner pursuant to a commitment order, the commissioner must, least thirty days prior to the expiration of the period prescribed in the order, apply to the court that issued the order, or to a superior court in the county where the secure facility is located, for a first retention order or a release order. The commissioner must give written notice of the application to the district attorney, the defendant, counsel for the defendant, and the mental hygiene legal service. Upon receipt of such application, the court may, on its own motion, conduct a hearing to determine whether the defendant has a dangerous mental disorder, and it must conduct such hearing if a demand therefor is made by the district attorney, the defendant, counsel for the defendant, hygiene legal service within ten days from the date that the mental notice of the application was given to them. If such a hearing is held on an application for retention, the commissioner must establish to the satisfaction of the court that the defendant has a dangerous mental disorder or is mentally ill. The district attorney shall be entitled to appear and present evidence at such hearing. If such a hearing is held on an application for release, the district attorney must establish to the satisfaction of the court that the defendant has a dangerous mental disorder or is mentally ill. If the court finds that the defendant has a dangerous mental disorder it must issue a first retention order. If the court finds that the defendant is mentally ill but does not have a

dangerous mental disorder, it must issue a first retention order and, pursuant to subdivision eleven of this section, a transfer order and an order of conditions. If the court finds that the defendant does not have a dangerous mental disorder and is not mentally ill, it must issue a release order and an order of conditions pursuant to subdivision twelve of this section.

- 9. Second and subsequent retention orders. When a defendant is in the custody of the commissioner pursuant to a first retention order, the commissioner must, at least thirty days prior to the expiration of the period prescribed in the order, apply to the court that issued the order, or to a superior court in the county where the facility is located, for a second retention order or a release order. commissioner must give written notice of the application to the district attorney, the defendant, counsel for the defendant, and the mental hygiene legal service. Upon receipt of such application, the court may, on its own motion, conduct a hearing to determine whether the defendant has a dangerous mental disorder, and it must conduct such hearing if a demand therefor is made by the district attorney, the defendant, counsel for the defendant, or the mental hygiene legal service within ten days from the date that notice of the application was given to them. If such a hearing is held on an application for retention, the commissioner must establish to the satisfaction of the court that the defendant has a dangerous mental disorder or is mentally ill. The district attorney shall be entitled to appear and present evidence at such hearing. If such a hearing is held on an application for release, the district attorney must establish to the satisfaction of the court that the defendant has a dangerous mental disorder or is mentally ill. If the court finds that the defendant has a dangerous mental disorder it must issue a second retention order. If the court finds that the defendant is mentally ill but does not have a dangerous mental disorder, it must issue a second retention order and, pursuant to subdivision eleven of this section, a transfer order and an order of conditions. If the court finds that the defendant does not have a dangerous mental disorder and is not mentally ill, it must issue a release order and an order of conditions pursuant to subdivision twelve of this section. When a defendant is in the custody of the commissioner prior to the expiration of the period prescribed in a second retention order, the procedures set forth in this subdivision for the issuance of a second retention order shall govern the application for and the issuance of any subsequent retention order.
- 10. Furlough order. The commissioner may apply for a furlough order,

pursuant to this subdivision, when a defendant is in his custody pursuant to a commitment order, recommitment order, or retention order and the commissioner is of the view that, consistent with the public safety and welfare of the community and the defendant, the clinical condition of the defendant warrants a granting of the privileges authorized by a furlough order. The application for a furlough order may be made to the court that issued the commitment order, or to a superior in the county where the secure facility is located. commissioner must give ten days written notice to the district attorney, the defendant, counsel for the defendant, and the mental hygiene legal service. Upon receipt of such application, the court may, on its own motion, conduct a hearing to determine whether the application should be granted, and must conduct such hearing if a demand therefor is made by the district attorney. If the court finds that the issuance of a furlough order is consistent with the public safety and welfare of the community and the defendant, and that the clinical condition of the defendant warrants a granting of the privileges authorized by a furlough order, the court must grant the application and issue a furlough order containing any terms and conditions that the court deems necessary or appropriate. If the defendant fails to return to the secure facility at the time specified in the furlough order, then, for purposes of subdivision nineteen of this section, he shall be deemed to have escaped.

11. Transfer order and order of conditions. The commissioner may apply for a transfer order, pursuant to this subdivision, when a defendant is in his custody pursuant to a retention order or a recommitment order, and the commissioner is of the view that the defendant does not have a dangerous mental disorder or that, consistent with the public safety and welfare of the community and the defendant, the clinical condition of the defendant warrants his transfer from a secure facility to a non-secure facility under the jurisdiction of the commissioner or to any non-secure facility designated by the commissioner. The application for a transfer order may be made to the court that issued the order under which the defendant is then in custody, or to a superior court in the county where the secure facility is located. The commissioner must give ten days written notice to the district attorney, the defendant, counsel for the defendant, and the mental hygiene legal service. Upon receipt of such application, the court may, on its own motion, conduct a hearing to determine whether the application should be granted, and must conduct such hearing if the demand therefor is made by the district attorney. At such hearing, the district attorney must establish to the satisfaction

of the court that the defendant has a dangerous mental disorder or that the issuance of a transfer order is inconsistent with the public safety and welfare of the community. The court must grant the application and issue a transfer order if the court finds that the defendant does not have a dangerous mental disorder, or if the court finds that the issuance of a transfer order is consistent with the public safety and welfare of the community and the defendant and that the clinical condition of the defendant, warrants his transfer from a secure facility to a non-secure facility. A court must also issue a transfer order when, in connection with an application for a first retention order pursuant to subdivision eight of this section or a second or subsequent retention order pursuant to subdivision nine of this section, it finds that a defendant is mentally ill but does not have a dangerous mental disorder. Whenever a court issues a transfer order it must also issue an order of conditions.

12. Release order and order of conditions. The commissioner may apply for a release order, pursuant to this subdivision, when a defendant is in his custody pursuant to a retention order or recommitment order, and the commissioner is of the view that the defendant no longer has a dangerous mental disorder and is no longer mentally ill. The application for a release order may be made to the court that issued the order under which the defendant is then in custody, or to a superior court in the county where the facility is located. The application must contain a description of the defendant's current mental condition, the past course of treatment, a history of the defendant's conduct subsequent to his commitment, a written service plan for continued treatment which shall include the information specified in subdivision (q) of section 29.15 of the mental hygiene law, and a detailed statement of the extent to which supervision of the defendant after release is proposed. The commissioner must give ten days written notice to the district attorney, the defendant, counsel for the defendant, and the mental hygiene legal service. Upon receipt of such application, the court must promptly conduct a hearing to determine the defendant's present mental condition. At such hearing, the district attorney must establish to the satisfaction of the court that the defendant has a dangerous mental disorder or is mentally ill. If the court finds that the defendant has a dangerous mental disorder, it must deny the application for a release order. If the court finds that the defendant does not have a dangerous mental disorder but is mentally ill, it must issue a transfer order pursuant to subdivision eleven of this section if the defendant is then confined in a secure facility. If the court finds that the defendant

does not have a dangerous mental disorder and is not mentally ill, it must grant the application and issue a release order. A court must also issue a release order when, in connection with an application for a first retention order pursuant to subdivision eight of this section or a second or subsequent retention order pursuant to subdivision nine of this section, it finds that the defendant does not have a dangerous mental disorder and is not mentally ill. Whenever a court issues a release order it must also issue an order of conditions. If the court has previously issued a transfer order and an order of conditions, it must issue a new order of conditions upon issuing a release order. The order of conditions issued in conjunction with a release order shall incorporate a written service plan prepared by a psychiatrist familiar with the defendant's case history and approved by the court, and shall contain any conditions that the court determines to be reasonably necessary or appropriate. It shall be the responsibility of the commissioner to determine that such defendant is receiving the services specified in the written service plan and is complying with any conditions specified in such plan and the order of conditions.

- 13. Discharge order. The commissioner may apply for a discharge order, pursuant to this subdivision, when a defendant has been continuously on an out-patient status for three years or more pursuant to a release order, and the commissioner is of the view that the defendant no longer has a dangerous mental disorder and is no longer mentally ill and that the issuance of a discharge order is consistent with the public safety and welfare of the community and the defendant. The application for a discharge order may be made to the court that issued the release order, or to a superior court in the county where the defendant is then residing. The commissioner must give ten days written notice to district attorney, the defendant, counsel for the defendant, and the mental hygiene legal service. Upon receipt of such application, the court may, on its own motion, conduct a hearing to determine whether the application should be granted, and must conduct such hearing if a demand therefor is made by the district attorney. The court must grant the application and issue a discharge order if the court finds that the defendant has been continuously on an out-patient status for three years or more, that he does not have a dangerous mental disorder and is not mentally ill, and that the issuance of the discharge order is consistent with the public safety and welfare of the community and the defendant.
- 14. Recommitment order. At any time during the period covered by an order of conditions an application may be made by the commissioner or the district attorney to the court that issued such order, or to a

superior court in the county where the defendant is then residing, for a recommitment order when the applicant is of the view that the defendant has a dangerous mental disorder. The applicant must give written notice of the application to the defendant, counsel for the defendant, and the mental hygiene legal service, and if the applicant is the commissioner he must give such notice to the district attorney or if the applicant is the district attorney he must give such notice to the commissioner. Upon receipt of such application the court must order the defendant to appear before it for a hearing to determine if the defendant has a dangerous mental disorder. Such order may be in the form of a written notice, specifying the time and place of appearance, served personally upon the defendant, or mailed to his last known address, as the court may direct. If the defendant fails to appear in court as directed, the court may issue a warrant to an appropriate peace officer directing him to take the defendant into custody and bring him before the court. In such circumstance, the court may direct that the defendant be confined in an appropriate institution located near the place where the court sits. The court must conduct a hearing to determine whether the defendant has a dangerous mental disorder. At such hearing, the applicant, whether he be the commissioner or the district attorney must establish to the satisfaction of the court that the defendant has a dangerous mental disorder. If the applicant is the commissioner, the district attorney shall be entitled to appear and present evidence at such hearing; if the applicant is the district attorney, the commissioner shall be entitled to appear and present evidence at such hearing. If the court finds that the defendant has a dangerous mental disorder, it must issue a recommitment order. When a defendant is in the custody of commissioner pursuant to a recommitment order, the procedures set forth in subdivisions eight and nine of this section for the issuance of retention orders shall govern the application for and the issuance of a first retention order, a second retention order, and subsequent retention orders.

15. Designation of psychiatric examiners. If, at any hearing conducted under this section to determine the defendant's present mental condition, the court is not satisfied with the findings of the psychiatric examiners, the court may direct the commissioner to designate one or more additional psychiatric examiners to conduct an examination of the defendant and submit a report of their findings. In addition, the court may on its own motion, or upon request of a party, may designate one or more psychiatric examiners to examine the defendant and submit a report of their findings. The district attorney may apply

to the court for an order directing that the defendant submit to an examination by a psychiatric examiner designated by the district attorney, and such psychiatric examiner may testify at the hearing.

- 16. Rehearing and review. Any defendant who is in the custody of the commissioner pursuant to a commitment order, a retention order, or a recommitment order, if dissatisfied with such order, may, within thirty days after the making of such order, obtain a rehearing and review of the proceedings and of such order in accordance with the provisions of section 9.35 or 15.35 of the mental hygiene law.
- 17. Rights of defendants. Subject to the limitations and provisions of this section, a defendant committed to the custody of the commissioner pursuant to this section shall have the rights granted to patients under the mental hygiene law.
- 18. Notwithstanding any other provision of law, no person confined by reason of a commitment order, recommitment order or retention order to a secure facility may be discharged or released unless the commissioner shall deliver written notice, at least four days excluding Saturdays, Sundays and holidays, in advance of such discharge or release to all of the following:
  - (a) the district attorney.
- (b) the police department having jurisdiction of the area to which the defendant is to be discharged or released.
  - (c) any other person the court may designate.

The notices required by this subdivision shall be given by the facility staff physician who was treating the defendant or, if unavailable, by the defendant's treatment team leader, but if neither is immediately available, notice must be given by some other member of the clinical staff of the facility. Such notice must be given by any means reasonably calculated to give prompt actual notice.

19. Escape from custody; notice requirements. If a defendant is in the custody of the commissioner pursuant to an order issued under this section, and such defendant escapes from custody, immediate notice of such escape shall be given by the department facility staff to: (a) the district attorney, (b) the superintendent of state police, (c) the sheriff of the county where the escape occurred, (d) the police department having jurisdiction of the area where the escape occurred, (e) any person the facility staff believes to be in danger, and (f) any law enforcement agency and any person the facility staff believes would be able to apprise such endangered person that the defendant has escaped from the facility. Such notice shall be given as soon as the facility staff know that the defendant has escaped from the facility and shall

include such information as will adequately identify the defendant and the person or persons believed to be in danger and the nature of the danger. The notices required by this subdivision shall be given by the facility staff physician who was treating the defendant or, if unavailable, by the defendant's treatment team leader, but if neither is immediately available, notice must be given by some other member of the clinical staff of the facility. Such notice must be given by any means reasonably calculated to give prompt actual notice. The defendant may be apprehended, restrained, transported to, and returned to the facility from which he escaped by any peace officer, and it shall be the duty of the officer to assist any representative of the commissioner to take the defendant into custody upon the request of such representative.

- 20. Required affidavit. No application may be made by the commissioner under this section without an accompanying affidavit from at least one psychiatric examiner supportive of relief requested in the application, which affidavit shall be served on all parties entitled to receive the notice of application. Such affidavit shall set forth the defendant's clinical diagnosis, a detailed analysis of his or her mental condition which caused the psychiatric examiner to formulate an opinion, and the opinion of the psychiatric examiner with respect to the defendant. Any application submitted without the required affidavit shall be dismissed by the court.
- 21. Appeals. (a) A party to proceedings conducted in accordance with the provisions of this section may take an appeal to an intermediate appellate court by permission of the intermediate appellate court as follows:
- (i) the commissioner may appeal from any release order, retention order, transfer order, discharge order, order of conditions, or recommitment order, for which he has not applied;
- (ii) a defendant, or the mental hygiene legal service on his or her behalf, may appeal from any commitment order, retention order, recommitment order, or, if the defendant has obtained a rehearing and review of any such order pursuant to subdivision sixteen of this section, from an order, not otherwise appealable as of right, issued in accordance with the provisions of section 9.35 or 15.35 of the mental hygiene law authorizing continued retention under the original order, provided, however, that a defendant who takes an appeal from a commitment order, retention order, or recommitment order may not subsequently obtain a rehearing and review of such order pursuant to subdivision sixteen of this section;
  - (iii) the district attorney may appeal from any release order,

transfer order, discharge order, order of conditions, furlough order, or order denying an application for a recommitment order which he opposed.

- (b) An aggrieved party may appeal from a final order of the intermediate appellate court to the court of appeals by permission of the intermediate appellate court granted before application to the court of appeals, or by permission of the court of appeals upon refusal by the intermediate appellate court or upon direct application.
- (c) An appeal taken under this subdivision shall be deemed civil in nature, and shall be governed by the laws and rules applicable to civil appeals; provided, however, that a stay of the order appealed from must be obtained in accordance with the provisions of paragraph (d) hereof.
- (d) The court from or to which an appeal is taken may stay all proceedings to enforce the order appealed from pending an appeal or determination on a motion for permission to appeal, or may grant a limited stay, except that only the court to which an appeal is taken may vacate, limit, or modify a stay previously granted. If the order appealed from is affirmed or modified, the stay shall continue for five days after service upon the appellant of the order of affirmance or modification with notice of its entry in the court to which the appeal was taken. If a motion is made for permission to appeal from such an order, before the expiration of the five days, the stay, or any other stay granted pending determination of the motion for permission to appeal; shall:
- (i) if the motion is granted, continue until five days after the appeal is determined; or
- (ii) if the motion is denied, continue until five days after the movant is served with the order of denial with notice of its entry.

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#### o Criminal Procedure

# ARTICLE 730--MENTAL DISEASE OR DEFECT EXCLUDING FITNESS TO PROCEED

#### Section

- 730.10 Fitness to proceed; definitions.
- 730.20 Fitness to proceed; generally.
- 730.30 Fitness to proceed; order of examination.
- 730.40 Fitness to proceed; local criminal court accusatory instrument.
- 730.50 Fitness to proceed; indictment.
- 730.60 Fitness to proceed; procedure following custody by commissioner.
- 730.70 Fitness to proceed; procedure following termination of custody by commissioner.
- S 730.10 Fitness to proceed; definitions.
- As used in this article, the following terms have the following meanings:
- 1. "Incapacitated person" means a defendant who as a result of mental disease or defect lacks capacity to understand the proceedings against him or to assist in his own defense.
- 2. "Order of examination" means an order issued to an appropriate director by a criminal court wherein a criminal action is pending against a defendant, or by a family court pursuant to section 322.1 of the family court act wherein a juvenile delinquency proceeding is

pending against a juvenile, directing that such person be examined for the purpose of determining if he is an incapacitated person.

- 3. "Commissioner" means the state commissioner of mental health or the state commissioner of mental retardation and developmental disabilities.
- 4. "Director" means (a) the director of a state hospital operated by the office of mental health or the director of a developmental center operated by the office of mental retardation and developmental disabilities, or (b) the director of a hospital operated by any local government of the state that has been certified by the commissioner as having adequate facilities to examine a defendant to determine if he is an incapacitated person, or (c) the director of community mental health services.
  - 5. "Qualified psychiatrist" means a physician who:
- (a) is a diplomate of the American board of psychiatry and neurology or is eligible to be certified by that board; or,
- (b) is certified by the American osteopathic board of neurology and psychiatry or is eligible to be certified by that board.
- 6. "Certified psychologist" means a person who is registered as a certified psychologist under article one hundred fifty-three of the education law.
- 7. "Psychiatric examiner" means a qualified psychiatrist or a certified psychologist who has been designated by a director to examine a defendant pursuant to an order of examination.
- 8. "Examination report" means a report made by a psychiatric examiner wherein he sets forth his opinion as to whether the defendant is or is not an incapacitated person, the nature and extent of his examination and, if he finds that the defendant is an incapacitated person, his diagnosis and prognosis and a detailed statement of the reasons for his opinion by making particular reference to those aspects of the proceedings wherein the defendant lacks capacity to understand or to assist in his own defense. The state administrator and the commissioner must jointly adopt the form of the examination report; and the state administrator shall prescribe the number of copies thereof that must be submitted to the court by the director.

## S 730.20 Fitness to proceed; generally.

1. The appropriate director to whom a criminal court issues an order of examination must be determined in accordance with rules jointly adopted by the judicial conference and the commissioner. Upon receipt of an examination order, the director must designate two qualified

psychiatric examiners, of whom he may be one, to examine the defendant to determine if he is an incapacitated person. In conducting their examination, the psychiatric examiners may employ any method which is accepted by the medical profession for the examination of persons alleged to be mentally ill or mentally defective. The court may authorize a psychiatrist or psychologist retained by the defendant to be present at such examination.

- 2. When the defendant is not in custody at the time a court issues an order of examination, because he was theretofore released on bail or on his own recognizance, the court may direct that the examination be conducted on an out-patient basis, and at such time and place as the director shall designate. If, however, the director informs the court that hospital confinement of the defendant is necessary for an effective examination, the court may direct that the defendant be confined in a hospital designated by the director until the examination is completed.
- 3. When the defendant is in custody at the time a court issues an order of examination, the examination must be conducted at the place where the defendant is being held in custody. If, however, the director determines that hospital confinement of the defendant is necessary for an effective examination, the sheriff must deliver the defendant to a hospital designated by the director and hold him in custody therein, under sufficient guard, until the examination is completed.
- 4. Hospital confinement under subdivisions two and three shall be for a period not exceeding thirty days, except that, upon application of the director, the court may authorize confinement for an additional period not exceeding thirty days if it is satisfied that a longer period is necessary to complete the examination. During the period of hospital confinement, the physician in charge of the hospital may administer or cause to be administered to the defendant such emergency psychiatric, medical or other therapeutic treatment as in his judgment should be administered.
- 5. Each psychiatric examiner, after he has completed his examination of the defendant, must promptly prepare an examination report and submit it to the director. If the psychiatric examiners are not unanimous in their opinion as to whether the defendant is or is not an incapacitated person, the director must designate another qualified psychiatric examiner to examine the defendant to determine if he is an incapacitated person. Upon receipt of the examination reports, the director must submit them to the court that issued the order of examination. The court must furnish a copy of the reports to counsel for the defendant and to the district attorney.

- 6. When a defendant is subjected to examination pursuant to an order issued by a criminal court in accordance with this article, any statement made by him for the purpose of the examination or treatment shall be inadmissible in evidence against him in any criminal action on any issue other than that of his mental condition, but such statement is admissible upon that issue whether or not it would otherwise be deemed a privileged communication.
- A psychiatric examiner is entitled to his reasonable traveling expenses, a fee of fifty dollars for each examination of a defendant and a fee of fifty dollars for each appearance at a court hearing or trial but not exceeding two hundred dollars in fees for examination and testimony in any one case; except that if such psychiatric examiner be an employee of the state of New York he shall be entitled only to reasonable traveling expenses, unless such psychiatric examiner makes the examination or appears at a court hearing or trial outside his hours of state employment in a county in which the director of community mental health services certifies to the fiscal officer thereof that there is a shortage of qualified psychiatrists available to conduct examinations under the criminal procedure law in such county, event he shall be entitled to the foregoing fees and reasonable traveling expenses. Such fees and traveling expenses and the costs of sending a defendant to another place of detention or to a hospital for examination, of his maintenance therein and of returning him shall, when approved by the court, be a charge of the county in which the defendant is being tried.

Sec. 730.30 Fitness to proceed; order of examination.

- 1. At any time after a defendant is arraigned upon an accusatory instrument other than a felony complaint and before the imposition of sentence, or at any time after a defendant is arraigned upon a felony complaint and before he is held for the action of the grand jury, the court wherein the criminal action is pending must issue an order of examination when it is of the opinion that the defendant may be an incapacitated person.
- 2. When the examination reports submitted to the court show that each psychiatric examiner is of the opinion that the defendant is not an incapacitated person, the court may, on its own motion, conduct a hearing to determine the issue of capacity, and it must conduct a hearing upon motion therefor by the defendant or by the district attorney. If no motion for a hearing is made, the criminal action against the defendant must

- proceed. If, following a hearing, the court is satisfied that the defendant is not an incapacitated person, the criminal action against him must proceed; if the court is not so satisfied, it must issue a further order of examination directing that the defendant be examined by different psychiatric examiners designated by the director.
- 3. When the examination reports submitted to the court show that each psychiatric examiner is of the opinion that the defendant is an incapacitated person, the court may, on its own motion, conduct a hearing to determine the issue of capacity and it must conduct such hearing upon motion therefor by the defendant or by the district attorney.
- 4. When the examination reports submitted to the court show that the psychiatric examiners are not unanimous in their opinion as to whether the defendant is or is not an incapacitated person, or when the examination reports submitted to the superior court show that the psychiatric examiners are not unanimous in their opinion as to whether the defendant is or is not a dangerous incapacitated person, the court must conduct a hearing to determine the issue of capacity or dangerousness.

# S 730.40 Fitness to proceed; local criminal court accusatory instrument.

- 1. When a local criminal court, following a hearing conducted pursuant to subdivision three or four of section 730.30, is satisfied that the defendant is not an incapacitated person, the criminal action against him must proceed. If it is satisfied that the defendant is an incapacitated person, or if no motion for such a hearing is made, such court must issue a final or temporary order of observation committing him to the custody of the commissioner for care and treatment in an appropriate institution for a period not to exceed ninety days from the date of the order. When a local criminal court accusatory instrument other than a felony complaint has been filed against the defendant, such court must issue a final order of observation; when a felony complaint has been filed against the defendant, such court must issue a temporary order of observation, except that, with the consent of the district attorney, it may issue a final order of observation.
- 2. When a local criminal court has issued a final order of observation, it must dismiss the accusatory instrument filed in such court against the defendant and such dismissal constitutes a bar to any further prosecution of the charge or charges contained in such

accusatory instrument. When the defendant is in the custody of the commissioner at the expiration of the period prescribed in a temporary order of observation, the proceedings in the local criminal court that issued such order shall terminate for all purposes and the commissioner must promptly certify to such court and to the appropriate district attorney that the defendant was in his custody on such expiration date. Upon receipt of such certification, the court must dismiss the felony complaint filed against the defendant.

- 3. When a local criminal court has issued an order of examination or a temporary order of observation, and when the charge or charges contained in the accusatory instrument are subsequently presented to a grand jury, such grand jury need not hear the defendant pursuant to section 190.50 unless, upon application by defendant to the superior court that impaneled such grand jury, the superior court determines that the defendant is not an incapacitated person.
- 4. When an indictment is filed against a defendant after a local criminal court has issued an order of examination and before it has issued a final or temporary order of observation, the defendant must be promptly arraigned upon the indictment, and the proceedings in the local criminal court shall thereupon terminate for all purposes. The district attorney must notify the local criminal court of such arraignment, and such court must thereupon dismiss the accusatory instrument filed in such court against the defendant. If the director has submitted the examination reports to the local criminal court, such court must forward them to the superior court in which the indictment was filed. If the director has not submitted such reports to the local criminal court, he must submit them to the superior court in which the indictment was filed.
- 5. When an indictment is timely filed against the defendant after the issuance of a temporary order of observation or after the expiration of the period prescribed in such order, the superior court in which such indictment is filed must direct the sheriff to take custody of the defendant at the institution in which he is confined and bring him before the court for arraignment upon the indictment. After the defendant is arraigned upon the indictment, such temporary order of observation or any order issued pursuant to the mental hygiene law after the expiration of the period prescribed in the temporary order of observation shall be deemed nullified. Notwithstanding any other provision of law, an indictment filed in a superior court against a defendant for a crime charged in the felony complaint is not timely for the purpose of this subdivision if it is filed more than six months

after the expiration of the period prescribed in a temporary order of observation issued by a local criminal court wherein such felony complaint was pending. An untimely indictment must be dismissed by the superior court unless such court is satisfied that there was good cause for the delay in filing such indictment.

#### S 730.50 Fitness to proceed; indictment.

- When a superior court, following a hearing conducted pursuant to subdivision three or four of section 730.30, is satisfied that the defendant is not an incapacitated person, the criminal action against him must proceed. If it is satisfied that the defendant is an incapacitated person, or if no motion for such a hearing is made, it must adjudicate him an incapacitated person, and must issue a final order of observation or an order of commitment. When the indictment does not charge a felony or when the defendant has been convicted of an offense other than a felony, such court (a) must issue a final order of observation committing the defendant to the custody of the commissioner for care and treatment in an appropriate institution for a period not to exceed ninety days from the date of such order and (b) must dismiss the indictment filed in such court against the defendant, and such dismissal constitutes a bar to any further prosecution of the charge or charges contained in such indictment. When the indictment charges a felony or when the defendant has been convicted of a felony, it must issue an order of commitment committing the defendant to the custody of the commissioner for care and treatment in an appropriate institution for a period not to exceed one year from the date of such order. Upon the issuance of an order of commitment, the court must exonerate the defendant's bail if he was previously at liberty on bail.
- 2. When a defendant is in the custody of the commissioner immediately prior to the expiration of the period prescribed in a temporary order of commitment and the superintendent of the institution wherein the defendant is confined is of the opinion that the defendant continues to be an incapacitated person, such superintendent must apply to the court that issued such order for an order of retention. Such application must be made within sixty days prior to the expiration of such period on forms that have been jointly adopted by the judicial conference and the commissioner. The superintendent must give written notice of the application to the defendant and to the mental hygiene legal service. Upon receipt of such application, the court may, on its own motion, conduct a hearing to determine the issue of capacity, and it must conduct such hearing if a demand therefor is made by the defendant

or the mental hygiene legal service within ten days from the date that notice of the application was given them. If, at the conclusion of a hearing conducted pursuant to this subdivision, the court is satisfied that the defendant is no longer an incapacitated person, the criminal action against him must proceed. If it is satisfied that the defendant continues to be an incapacitated person, or if no demand for a hearing is made, the court must adjudicate him an incapacitated person and must issue an order of retention which shall authorize continued custody of the defendant by the commissioner for a period not to exceed one year.

- 3. When a defendant is in the custody of the commissioner immediately prior to the expiration of the period prescribed in the first order of retention, the procedure set forth in subdivision two shall govern the application for and the issuance of any subsequent order of retention, except that any subsequent orders of retention must be for periods not to exceed two years each; provided, however, that the aggregate of the periods prescribed in the temporary order of commitment, the first order of retention and all subsequent orders of retention must not exceed two-thirds of the authorized maximum term of imprisonment for the highest class felony charged in the indictment or for the highest class felony of which he was convicted.
- 4. When a defendant is in the custody of the commissioner at the expiration of the authorized period prescribed in the last order of retention, the criminal action pending against him in the superior court that issued such order shall terminate for all purposes, and the commissioner must promptly certify to such court and to the appropriate district attorney that the defendant was in his custody on such expiration date. Upon receipt of such certification, the court must dismiss the indictment, and such dismissal constitutes a bar to any further prosecution of the charge or charges contained in such indictment.
- 5. When, on the effective date of this subdivision, any defendant remains in the custody of the commissioner pursuant to an order issued under former code of criminal procedure section six hundred sixty-two-b, the superintendent or director of the institution where such defendant is confined shall, if he believes that the defendant continues to be an incapacitated person, apply forthwith to a court of record in the county where the institution is located for an order of retention. The procedures for obtaining any order pursuant to this subdivision shall be in accordance with the provisions of subdivisions two, three and four of this section, except that the period of retention pursuant to the first order obtained under this subdivision shall be for not more than one

year and any subsequent orders of retention must be for periods not to exceed two years each; provided, however, that the aggregate of the time spent in the custody of the commissioner pursuant to any order issued in accordance with the provisions of former code of criminal procedure section six hundred sixty-two-b and the periods prescribed by the first order obtained under this subdivision and all subsequent orders of retention must not exceed two-thirds of the authorized maximum term of imprisonment for the highest class felony charged in the indictment or the highest class felony of which he was convicted.

- S 730.60 Fitness to proceed; procedure following custody by commissioner.
- 1. When a local criminal court issues a final or temporary order of observation or an order of commitment, it must forward such order and a copy of the examination reports and the accusatory instrument to the commissioner, and, if available, a copy of the pre-sentence report. receipt thereof, the commissioner must designate an appropriate institution operated by the department of mental hygiene in which the defendant is to be placed. The sheriff must hold the defendant in custody pending such designation by the commissioner, and when notified of the designation, must deliver the defendant to the superintendent of such sheriff institution. The superintendent must promptly inform the appropriate director of the mental hygiene legal service of the defendant's admission to such institution. If a defendant escapes from the custody of the commissioner, the escape shall interrupt the period prescribed in any order of observation, commitment or retention, and such interruption shall until the defendant is returned to the custody of the continue commissioner.
- 2. Except as otherwise provided in subdivisions four and five, when a defendant is in the custody of the commissioner pursuant to a temporary order of observation or an order of commitment or an order of retention, the criminal action pending against the defendant in the court that issued such order is suspended until the superintendent of the institution in which the defendant is confined determines that he is no longer an incapacitated person. In that event, the court that issued such order and the appropriate district attorney must be notified, in writing, by the superintendent of his determination. The court must thereupon proceed in accordance with the provisions of subdivision two of section 730.30 of this chapter; provided, however, if the court is satisfied that the defendant remains an incapacitated person, and upon consent of all parties, the court may order the return of the defendant to the institution in which he had been confined for such period of time as was authorized by the prior order

- of commitment or order of retention. Upon such return, the defendant shall have all rights and privileges accorded by the provisions of this article.
- 3. When a defendant is in the custody of the commissioner pursuant to an order issued in accordance with this article, the commissioner may transfer him to any appropriate institution operated by the department of mental hygiene. The commissioner may discharge a defendant in his custody under a final order of observation at any time prior to the expiration date of such order, or otherwise treat or transfer such defendant in the same manner as if he were a patient not in confinement under a criminal court order.
- 4. When a defendant is in the custody of the commissioner pursuant to an order of commitment or an order of retention, he may make any motion authorized by this chapter which is susceptible of fair determination without his personal participation. If the court denies any such motion it must be without prejudice to a renewal thereof after the criminal action against the defendant has been ordered to proceed. If the court enters an order dismissing the indictment and does not direct that the charge or charges be resubmitted to a grand jury, the court must direct that such order of dismissal be served upon the commissioner.
- 5. When a defendant is in the custody of the commissioner pursuant to an order of commitment or an order of retention, the superior court that issued such order may, upon motion of the defendant, and with the consent of the district attorney, dismiss the indictment when the court is satisfied that (a) the defendant is a resident or citizen of another state or country and that he will be removed thereto upon dismissal of the indictment, or (b) the defendant has been continuously confined in the custody of the commissioner for a period of more than two years. granting a motion under this subdivision, the court must be further satisfied that dismissal of the indictment is consistent with the ends of justice and that custody of the defendant by the commissioner pursuant to an order of commitment or an order of retention is not necessary for the protection of the public and that care and treatment can be effectively administered to the defendant without the necessity of such order. If the court enters an order of dismissal under this subdivision, it must set forth in the record the reasons for such action, and must direct that such order of dismissal be served upon the commissioner. The dismissal of an indictment pursuant to this subdivision constitutes a bar to any further prosecution of the charge or charges contained in such indictment.
- 6. (a) Notwithstanding any other provision of law, no person committed to the custody of the commissioner pursuant to this article, or continuously thereafter retained in such custody, shall be discharged, released on condition or placed in any less secure facility or on any less restrictive

status, including, but not limited to vacations, furloughs and temporary passes, unless the commissioner shall deliver written notice, at least four days, excluding Saturdays, Sundays and holidays, in advance of the change of such committed person's facility or status, to all of the following:

- (1) The district attorney of the county from which such person was committed;
  - (2) The superintendent of state police;
  - (3) The sheriff of the county where the facility is located;
- (4) The police department having jurisdiction of the area where the facility is located;
- (5) Any person who may reasonably be expected to be the victim of any assault or any violent felony offense, as defined in the penal law, which would be carried out by the committed person; and
  - (6) Any other person the court may designate.
- Said notice may be given by any means reasonably calculated to give prompt actual notice.
- (b) The notice required by this subdivision shall also be given immediately upon the departure of such committed person from the commissioner's actual custody, without proper authorization. Nothing in this subdivision shall be construed to impair any other right or duty regarding any notice or hearing contained in any other provision of law.
- (c) Whenever a district attorney has received the notice described in this subdivision, and the defendant is in the custody of the commissioner pursuant to a final order of observation or an order of commitment, he may apply within three days of receipt of such notice to a superior court, for an order directing a hearing to be held to determine whether such committed person is a danger to himself or others. Such hearing shall be held within ten days following the issuance of such order. Such order may provide that there shall be no further change in the committed person's facility or status until the hearing. Upon a finding that the committed person is a danger to himself or others, the court shall issue an order to the commissioner authorizing retention of the committed person in the status existing at the time notice was given hereunder, for a specified period, not to exceed six months. The district attorney and the committed person's attorney shall be entitled to the committed person's clinical records in the commissioner's custody, upon the issuance of an order directing a hearing to be held.
- (d) Nothing in this subdivision shall be construed to impair any other right or duty regarding any notice or hearing contained in any other provision of law.

S 730.70 Fitness to proceed; procedure following termination of custody by commissioner.

When a defendant is in the custody of the commissioner on the expiration date of a final or temporary order of observation or an order of commitment, or on the expiration date of the last order of retention, or on the date an order dismissing an indictment is served upon the commissioner, the superintendent of the institution in which the defendant is confined may retain him for care and treatment for a period of thirty days from such date.

If the superintendent determines that the defendant is so mentally ill or mentally defective as to require continued care and treatment in an institution, he may, before the expiration of such thirty day period, apply for an order of certification in the manner prescribed in section 31.33 of the mental hygiene law.

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## New York State Consolidated Laws

o Mental Hygiene

ARTICLE 47
MENTAL HYGIENE LEGAL SERVICE

Section 47.01 Mental hygiene legal service.

47.03 Functions, powers and duties of the service.

### S 47.01 Mental hygiene legal service.

(a) There shall be a mental hygiene legal service of the state in each judicial department. The service shall provide legal assistance to patients or residents of a facility as defined in section 1.03 of this chapter, or any other place or facility which is required to have an operating certificate pursuant to article sixteen or thirty-one of this chapter, and to persons alleged to be in need of care and treatment in such facilities or places. The head of such service in each judicial department and such assistants and such staff as may be necessary shall be appointed and may be removed by the presiding justice of the appellate division of the judicial department. Appointments and transfers to the service shall comply with the provisions of the civil service law. Standards for qualifications of the personnel in the service shall be established by the presiding justice of the appellate division of the judicial department. The presiding justice of the appellate division of the judicial department shall promulgate such rules or regulations as may be necessary to effectuate the purposes of

this article.

- (b) No court, judge or justice exercising responsibility for the administration of the courts pursuant to section twenty-eight of article six of the constitution shall be disqualified in any judicial proceeding brought pursuant to this article solely by reason of the fact that administrative responsibilities with respect to the service are imposed herein.
- S 47.03 Functions, powers and duties of the service.

The mental hygiene legal service in each judicial department of the state shall perform the following duties:

- (a) To study and review the admission and retention of all patients or residents which shall include a review of the willingness of the patient or resident to remain in his or her status and the determination of the facility director as to suitability of such status, as provided for by this chapter;
- (b) To inform patients or residents and, in proper cases, others interested in such persons' welfare of procedures for admission and retention and of the patients' or residents' right to have judicial hearing and review, to be represented by legal counsel, and to seek independent medical opinion;
- \* (c) To provide legal services and assistance to patients or residents and their families related to the admission, retention, and care and treatment of such persons, to provide legal services and assistance to subjects of a petition or patients subject to section 9.60 of this chapter, and to inform patients or residents, their families and, in proper cases, others interested in the patients or residents welfare of the availability of other legal resources which may be of assistance in matters not directly related to the admission, retention, and care and treatment of such patients or residents;
  - \* NB Effective until June 30, 2005
- \* (c) To provide legal services and assistance to patients or residents and their families related to the admission, retention, and care and treatment of such persons, and to inform patients or residents, their families and, in proper cases, others interested in the patients or residents` welfare of the availability of other legal resources which may be of assistance in matters not directly related to the admission, retention, and care and treatment of such patients or residents;
  - \* NB Effective June 30, 2005
- (d) To be granted access at any and all times to any facility or place or part thereof described in subdivision (a) of section 47.01 of this

article, and to all books, records and data pertaining to any such facility or place deemed necessary for carrying out its functions, powers and duties. The mental hygiene legal service may require from the officers or employees of such facility or place any information deemed necessary for the purpose of carrying out the service's functions, powers and duties. Information, books, records or data which are confidential and any limitations on the release thereof imposed by law upon the party furnishing the information, books, records or data shall apply to the service. Provided, however, whenever federal regulations restrict, or as a condition of federal aid require that a facility restrict the release of information contained in the clinical record of a patient or client, or restrict disclosure of the identity of a patient or access to that patient, to a greater extent than is allowed under this section, the provisions of such federal law or federal regulation shall be controlling; and

(e) To initiate and take any legal action deemed necessary to safeguard the right of any patient or resident to protection from abuse or mistreatment, which may include investigation into any such allegations of abuse or mistreatment of any such patient or resident.

## Appendix C

1999 Kirby Forensic Psychiatric Center Staff Workplace Survey

## KFPC Staff Workplace Survey: 1999

All answers to this survey are anonymous. Please do not write your me on the survey. No surveys will be examined for individual content. Only general groupings of responses and trends (e.g., Maintenance, Nursing, SHTA, evening-shift employees, etc.) will be reported. Surveys will be stored in locked cabinets and eventually will be shredded after the exponses have been coded and entered into the computer.

It is important for everyone's opinions to be heard in a responsible, onscientious manner. Thank you for your assistance. It is appreciated.

emographics: OPTIONAL
. What Department do you Work For: Check the appropriate box above, then check your particular discipline.
Psychology TTL/UC Maintenance/Housekeeping Social Work Dietary Personnel Psychiatry Dental Business Office/Storeroom Medicine Rehabilitation Prog Op./QA/Stf Devl/Risk Manage Pharmacy SHTA Safety Nursing Clerical Other (specify):
Shift: Day Evening Night
. Sex: Temale Male
f the 6 items by placing the number corresponding to your level of atisfaction for each item in the blank provided.
issatisfied dissatisfied dissat. satisfied satisfied satisfied
How satisfied are you with your co-workers?
How satisfied are you with your ability to have meaningful input into how you do your job?
How satisfied are you with your chances for advancement/promotion?
How satisfied are you with your access to needed training?
How satisfied are you with your job as a whole?
How satisfied are you with your immediate supervisor?

Instructions: Answer the next 21 items by indicating the amount of agreement you have toward each statement. A six-point scale is provided below and at the top of each subsequent page to indicate your different levels of agreement. Place the number in the space provided which adicates your level of agreement to the statement

							9		
ı higl	-	moderately	mildly	mildly	moderately		doesn't		
isa	agree	disagree	disagree	agree	agree	agree	apply		
	The w	ork is really	challenging						
. Employees at KFPC go out of their way to help a new employee feel comfortable									
•	Super	visors treat	me with resp	ect					
• .	KFPC	is a well-man	aged hospita	.1					
	I hav	re a good work	ing relation	ship with	my co-workers	/associate	s		
•		el that people accepted wit			backgrounds	are			
	The e	employee orien	tation at KE	PC is adèq	uate				
		el that inform hospital are		-	_	ration of			
•	Super	visors usuall	y compliment	employees	who do somet	hing well			
0.	I am	n proud to wor	k at KFPC						
1.	Empl	oyees are emp	owered to ma	ke their o	wn decisions.				
2.	I er	njoy my job.							
3.	Poli	cies and regu	lations are	generally	clear and und	erstandabl	e		
4.	I wi	ll be working	at KFPC one	e year from	now				
5.	I wi	ll be working	at KFPC fiv	e years fr	om now				
6.	Harc	d work is appr	eciated and	rewarded a	t KFPC				
7.	KFPC	C is a highly	efficient, w	ork-orient	ed place				
8.	Peop	ole put a lot	of effort ir	nto what th	ey do at KFPC				

igh:	2 ly moderately gree disagree	3 mildly disagree	4 mildly agree	5 moderately agree	6 highly agree	9 doesn't apply				
19.	9. My job function and responsibilities have been clearly explained to me and I understand them									
0.	Rules and regula	tions are wel	l enforced							
1.	Supervisors meet with employees regularly to discuss their future work goals									
	ructions: For th t paragraph. Use					th a				
hat	do you like best	about KFPC_				·				
hat	do you like leas	t about KFPC_		<u></u>	· · · · · · · · · · · · · · · · · · ·					
	KEDO -									
<u></u>	can KFPC improve?									
		· · · · · · · · · · · · · · · · · · ·	···							
OW	do you think you									
hat	suggestions do y	ou have to in	ncrease sta	aff morale?						

hank you again for your participation. We realize this is a long survey hat requires a large amount of time on your part to complete. It is moortant that your opinions are registered and heard.

## Appendix D

Letter Of Consent To Participate In A Research Study

### CONSENT TO PARTICIPATE IN A RESEARCH STUDY

### Research Tile:

"An Examination Of The Relationship Between Employee Turnover And Job Satisfaction At Kirby Forensic Psychiatric Center"

You are being invited to volunteer as a subject in a research study being conducted at Kirby Forensic Psychiatric Center (KFPC). This study is a comparative analysis of job satisfaction of current and former employees as a basis for better understanding and improving employee turnover at KFPC. The research sought to answer the questions: (1) "Is there a measurable pattern of job satisfaction that corresponds with employee turnover at Kirby Forensic Psychiatric Center?" and (2) "Does this pattern indicate that employees who are less satisfied with certain aspects of their jobs are more likely to leave the institution?"

This study at KFPC is governed by federal and state laws regulating human subjects research. If you consent to participate in this study, your personal information will not be released without your permission. In addition, your personal identity will not be used in any publication without your prior permission; only the data obtained as a result of your participation in this study will be made public.

Participation is voluntary. You can refuse to participate by not returning the questionnaire, or you may withdraw from the study at any time. If you decide to withdraw your participation, your responses to the questionnaire will not be included in this study.

If you have any questions regarding this study and your rights as a research subject, you can reach Mr. Claude Sheng at (212) 427-9003 ext. 3695.

Thank you for your time.

Sincerely yours,

Claude Sheng

# Appendix E

	ection I				Sect	ion II												Se	ction	Ш								<u></u>	
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6	N	F	4	2	1	3	1	4	2	1	4	1	5	1	11	2	1	1_1_	L			1 1	1	1 1	1 1	6	3	5
6	N	F	5	1	11	1	1	5	1	4	5	1	5	5	3	3	3	1		·			1 1	<del>                                     </del>	<del> </del>	I	2	1
6	N	F	5	5	1	1	1	1	5		2	1	6	5	1	1	1	2	L			1_1_	1	<del>   </del>	<del>                                     </del>	2	1	1
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8	D	М	6	4	4	5	4	6	5	6	6	6	5	5	5	5	5	6			6 6	5	6	5	5 5	6		5
8	D	М	6	5	5	6	5	6	5	6	6	6	5	5	5	5	5	6	L		6 6	5	6	5	<b></b>	6	6	1
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Section	1	Ι		Sect	ion li			r					-		-		Se	ction	111									
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10 D	М	5	4	4	3	5	5	6	4	5	5	5	5	5	5	4	4	3	5	3	5	5	4	4	4	5	4	5
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10 D	<u></u> M	4	4	6	6	4	5	4	1	4	3	3	3	4	4	1	6	4	6	4	6	9	1	1	5	6	6	5
10 D	<u></u> M	5	5	5	4	5	5	6	4	5	5	5	5	5	<u>-</u> 5	4	4	3	<u>5</u>	3	5	5	4	4	4	5	4	5
10 D	M	- 6	6	5	5	6	6	6	5	6	5	5	5	5	5	5	5	5	<u>-</u> 5	5	6	5	5	5	5	6	6	5
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11 D	<u>M</u>	6	6	6	4	5	5	5	4	5	5	5	5	5	4	5	5	5	6		6	***********	6	**********	4	6	5	4
11 D	<u>M</u>	6	6	6	4	5	6	6	4	5	5	6	6	5	5	4	6	5	6	4	*********	6 3	4	6 4	6	1	<u>3</u>	3
11 D	<u>M</u>	4	1	6	1	5	5	6	3	6	1	4	3		6	5	5	1	5	11	5	3		2	3	5	3	1
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11 D	М	5	1	5	4	3	4	4	5	5	1	5	5	5	5	4	5	3	5	5	6	3	4	4	5	5	5	1

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11   D   M   6   6   6   4   5   5   6   6   4   5   5   6   6   6   5   5   4   6   6   6   6   6   6   6   6   6						5	1	5	5	6	1	3	4	1	6	3	6	5	5	1	6	1	4	М	D	11
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11         E         M         4         2         2         1         4         5         6         4         5         1         5         3         4         1         4         2         5         4         1         2         5         4         1         2         3         1         2         5         4         1         2         3         1         2         2         6         4         2         3         4         4         2         3         4         2         2         4         4         2         4         4         2         2         4         4         2         2         4         4         4         5         5         4         4         1         4         2         5         4         4         4         1         4         2         5         4         4         1         4         3         3         5         4         4         1         4         3         3         4         1         2         3         4         1         4         2         2         4         1         2         3         4         1         4			4 1	6	3	4	3	3	1	4	4	5	5		5	5	4				*********					
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11         E         M         6         4         3         3         4         4         4         5         5         4         5         5         4         1         3         3         4         3         6         4         1         3         3         4         3         6         4         1         2         3         4         1         4         4         1         4         4         1         4         2         2         5         4         1         2         2         6         4         1         2         3         4         1         4         4         1         4         2         2         2         2         1         5         5         4         4         5         5         4         4         1         4         3         1         2         2         6         4         4         5         5         4         4         1         4         4         1         4         4         1         4         4         1         4         3         3         4         1         2         3         5         3         2         2				***				<b>4</b>				L					5	5	2	**********	3	3	5	М		11
11 E M 3 3 3 5 2 5 6 4 5 3 5 5 4 1 4 3 1 2 2 6 4 2 3 4 1 1 E M 6 3 2 2 1 4 5 6 4 5 5 4 4 3 5 5 4 4 1 4 3 1 2 2 6 4 2 3 4 1 1 2 3 1 1 E M 6 3 2 2 1 4 5 6 4 5 5 5 4 5 5 5 4 1 4 1 4 3 1 2 2 6 4 2 3 4 1 1 E M 6 4 3 3 3 4 4 4 4 5 5 5 4 5 5 5 4 5 5 5 4 4 1 4 1							<b></b>	4		<b></b>		1				***********			4	3			6	М		
11         E         M         5         2         2         2         1         5         5         4         4         3         5         4         9         2         4         3         2         4         3         5         3         2         2         5           11         E         M         6         4         3         3         5         4         5         5         4         4         1         3         3         4         1         3         3         4         1         4         3         6         4         1         3         3         4         1         4         4         1         4         2         5         3         1         2         2         6         4         2         3         4         1         4         4         1         4         4         1         4         4         1         4         4         1         4         4         1         4         4         1         4         4         1         4         4         1         4         3         1         2         2         6         4         2							· <del> </del>	**********				L						*********		***********	********	*********	**********	******		*********
11 E M 6 4 3 3 4 4 4 4 5 5 4 5 5 4 5 5 4 4 1 3 3 4 4 3 6 4 1 3 5 1 2 3 1 1 E M 4 2 2 1 1 4 5 6 4 5 1 5 5 4 5 5 4 1 4 1 4 4 1 4 2 5 3 1 2 2 5 1 1 E M 5 3 3 5 2 5 6 4 5 5 5 4 5 5 5 4 4 1 4 1 3 3 5 5 3 2 2 5 5 6 4 5 5 5 4 5 5 5 4 5 5 5 4 5 5 5 4 1 1 4 1 4				1			<b></b>		ļ		**********	<b></b>			***********			***************************************					**********			
11 E M 4 2 2 1 1 4 5 6 4 5 1 5 3 3 4 1 4 1 4 3 1 2 2 6 4 2 3 4 1 E M 5 3 3 5 5 5 4 4 1 3 3 1 2 2 2 6 4 2 3 4 1 1 E M 6 3 2 2 1 4 5 6 4 5 1 5 3 5 5 4 1 4 1 4 3 1 2 2 6 6 4 2 3 4 1 1 E M 6 3 3 2 2 1 4 5 6 4 5 1 5 3 5 5 4 1 4 1 4 3 1 2 2 2 6 4 1 3 5 3 2 2 5 5 1 4 1 1 2 3 1 1 E M 6 1 3 3 3 3 2 2 5 5 6 4 5 5 1 5 3 5 5 4 1 1 4 3 1 1 2 2 2 6 4 1 1 3 3 5 1 1 2 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			**********	************		4						L						******		*************			*********	*****		***********
11 E M 3 3 3 5 2 5 5 4 4 3 5 5 4 9 2 4 3 2 4 3 5 3 5 3 2 2 5 5 1 2 5 1 2 5 1 1 E M 6 3 2 2 1 4 5 5 6 4 5 3 5 5 4 1 4 1 4 3 1 2 2 6 6 4 2 3 4 1 1 E M 6 1 3 3 3 3 5 2 5 5 6 4 5 5 3 5 5 4 1 1 4 1 4 1 4 2 5 2 1 1 2 3 1 1 E M 6 1 3 3 3 3 3 5 2 5 5 5 4 4 4 3 5 5 4 9 2 4 3 2 4 3 5 5 3 2 2 2 5 5 1 1 E M 6 1 3 3 3 3 4 4 4 4 4 5 5 5 4 5 5 5 4 5 5 5 4 4 1 1 4 3 1 2 2 2 6 4 4 2 3 3 4 1 1 E M 6 1 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3				**					*********			L			********			***********		***********		***********	*********			
11         E         M         5         3         3         2         2         5         5         4         4         3         5         4         9         2         4         3         2         4         3         5         3         2         2         5         5         4         4         9         2         4         3         2         4         3         5         3         2         2         5         5         4         4         1         3         3         4         3         5         3         6         4         1         3         3         4         1         4         4         4         5         6         4         5         1         5         3         4         1         4         4         1         4         4         1         4         4         1         4         4         1         4         4         1         4         4         1         4         4         1         4         4         1         4         4         1         4         4         1         4         4         1         4         4         1				***						************		L									**********			*****		
11         E         M         6         3         2         2         4         4         5         5         4         5         5         4         4         1         3         3         4         3         6         4         1         3         5         2         5         6         4         5         5         4         5         5         4         4         1         4         2         5         2         1         2         3         3         4         1         4         4         1         4         4         1         4         2         5         2         1         2         3           11         E         M         3         3         3         2         5         5         6         4         5         3         5         5         4         1         3						<b>†</b>				***********		<b></b>		**********	*******			*********			***********				4	*********
11         E         M         4         2         2         1         4         5         6         4         5         1         5         3         4         1         4         4         1         4         2         5         2         1         2         3         3         3         3         5         2         5         6         4         5         3         5         5         4         1         4         4         1         4         4         1         4         3         1         2         2         6         4         2         3         4         4         4         5         5         4         4         9         2         4         3         1         2         2         6         4         2         3         4         4         4         5         5         4         4         9         2         4         3         2         5         5         4         4         9         2         4         3         3         4         1         3         3         4         1         3         3         4         1         3         3			4 1	6	3				1		**********	L					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	********					**********	******		
11         E         M         3         3         3         5         2         5         6         4         5         3         5         5         4         1         4         3         1         2         2         6         4         2         3         4           11         E         M         5         3         3         2         5         5         4         4         9         2         4         3         2         4         1         3         3         2         4         4         4         9         2         4         3         2         4         1         3         3         2         4         4         4         5         5         4         4         9         2         4         3         3         2         2         5           11         E         M         6         4         3         5         5         4         5         5         4         4         1         3         3         4         1         2         3           11         E         M         3         3         3         2         5 <td></td> <td>1 2</td> <td>2 1</td> <td>5</td> <td>2</td> <td>4</td> <td>1</td> <td>4</td> <td>4</td> <td>1</td> <td>4</td> <td>3</td> <td>5</td> <td>1</td> <td></td> <td>******</td> <td></td> <td></td> <td></td> <td></td> <td>**********</td> <td></td> <td>***********</td> <td></td> <td></td> <td></td>		1 2	2 1	5	2	4	1	4	4	1	4	3	5	1		******					**********		***********			
11         E         M         5         3         3         2         5         5         4         4         3         5         4         9         2         4         3         2         4         3         5         3         2         2         5           11         E         M         6         4         3         3         4         4         4         5         5         4         5         5         4         4         1         3         3         4         3         5         4         4         5         5         4         5         5         4         4         1         3         3         4         3         6         4         1         3         3         4         3         5         4         4         5         5         4         4         1         4         4         1         4         4         1         4         4         1         4         4         1         4         4         1         4         4         1         4         4         1         4         4         1         4         3         1         2				6	2	2	1	3	4	1	4	5	5	3	5	4	6			5			*********	*********		
11         E         M         4         2         2         1         4         5         6         4         5         1         5         3         4         1         4         2         5         4         1         2         3         4         1         4         4         2         5         4         1         4         4         1         4         2         5         4         1         4         4         1         4         2         5         4         1         4         3         1         2         2         6         4         2         3         4         1         4         3         1         2         2         6         4         2         3         4         1         4         3         1         2         2         6         4         2         3         4         1         4         3         1         2         2         6         4         2         3         4         1         4         3         1         2         2         6         4         2         3         4         1         4         3         3         4				** **********		4			4	2	9	L	5	3	4	4	5	5	2	3	3	3	5	М		11
11 E M 3 3 3 5 2 5 6 4 5 3 5 5 4 1 4 3 1 2 2 6 4 2 3 4 1 E M 5 3 3 5 5 5 4 5 5 5 4 1 1 4 3 1 2 2 6 4 2 3 4 1 1 E M 6 4 3 3 3 4 4 4 4 5 5 4 5 5 4 5 5 4 4 1 3 3 3 4 3 6 4 1 3 5 5 1 1 E M 6 4 2 2 1 4 5 6 4 5 1 5 3 4 1 4 4 1 4 4 1 4 2 5 4 1 2 3 1 1 2 D 9 6 6 6 4 5 5 6 5 5 6 6 6 6 6 6 6 6 6 6 5 6 6 6 5 5 5 4 5 5 5 5								4		***********		<b></b>				5	4		4	3	3	4	6	М	E	11
11 E M 5 3 3 3 2 5 5 4 4 3 5 5 4 9 2 4 3 2 4 3 5 5 2 2 5 5 1 E M 6 4 3 3 3 4 4 4 5 5 5 4 5 5 4 4 1 3 3 3 4 1 4 3 5 5 5 2 2 3 5 1 E M 6 4 5 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6						4				************		L		L	*********			***********					4	М		11
11 E M 6 4 3 3 4 4 4 5 5 4 5 5 4 4 1 3 3 3 4 3 6 4 1 3 5 1 1 2 3 1 1 E M 4 2 2 1 4 5 6 4 5 1 5 3 4 1 4 4 1 4 2 5 4 1 2 3 1 1 2 0 9 6 6 4 5 5 6 5 5 6 6 6 6 6 5 6 6 5 5 4 5 5 5 5				***						**********		<b></b>		**********				********	***********	*********	********	***********		М		
11 E M 4 2 2 1 4 5 6 4 5 1 5 3 4 1 4 4 1 4 2 5 4 1 2 3 1 2 D 9 6 6 4 5 5 6 5 5 6 6 6 6 5 6 6 6 5 5 4 5 5 5 5								4				L	I	**********	*********		**********	**********	************	***********		*************	*********			*********
12 D 9 6 6 4 5 5 6 5 5 6 6 6 6 5 6 6 5 5 4 5 5 5 5					. <del></del>	4				•		L			**********			**********			************		******	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
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13 D 9 5 6 4 5 4 6 6 6 3 6 4 5 5 5 5 3 6 5 5 3 3 5 5 5 5 1 5 5 5 5 5 5 5 5 5 5 5					•••••				**********																	
13 D F 5 4 5 4 5 5 5 5 5 5 5 5 5 5 1 5 5 3 2 4 4 5 5								A		<b></b>			*********	***********		**********		**********			**********	**********				******
13 D F 6 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	5 5 5 5	5   5			.4				***********	4		L	I					*********			*********		***************************************			

	ection		<b>T</b>		Sect	ion II					-							Se	ction	III									
	D/E/N		111	112	113	114	II5	116	1111	1112	1113	1114	III5	1116	1117	1118	1119	11110	11111	III12	11113	<b>III14</b>	11115	11116	11117	11118	11119	11120	11121
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13	D	F	6	5	4	5	4	6	6	6	6	5	6	6	6	5	5	5	4	3	4	9	3	5	5	5	5	6	6
13	D	F	6	6	5	6	6	6	5	6	6	6	6	6	6	5	6	6	2	6	6	4	4	5	5	6	6	6	6
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13	D	М	5	5	5	5	4	5	5	5	5	4	5	5	5	5	5	5	4	5	5	5	5	1	3	4	5	5	4
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13	D	М	6	6	4	6	6	6	3	6	6	5	6	6	6	5	6	6	5	6	5	9	9	5	5	5	6	5	6
13	D	М	5	6	5	4	5	6	3	4	6	5	5	4	3	9	5	6	4	6	4	6	9	6	5	9	4	4	5
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13	D	М	2	4	4	4	4	3	2	2	2	2	2	2	4	2	2	5	4	3	4	6	4	1	3	2	4	1	4
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14	D	F	5	5	3	4	5	5	5	4	5	5	5	5	5	4	5	5	3	5	5	5	3	5	5	5	5	3	1
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14	D	F	6	5	2	3	4	4	4	2	4	4	4	4	4	2	4	4	1	5	5	5	3	4	4	4	4	3	2
14	D	F	6	5	3	4	6	6	6	5	6	6	6	6	6	5	6	6	4	6	6	6	5	6	6	6	6	4	1
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14	D	М	6	6	4	5	6	6	6	5	6	6	6	6	6	5	6	6	4	6	6	6	6	6	6	6	6	4	1
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15	D	F	5	6	4	5	6	6	6	5	6	6	6	6	6	5	6	6	4	6	6	6	5	6	6	6	6	4	2
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15	D	M	6	6	4	5	6	6	6	5	6	6	6	6	6	5	6	6	4	6	6	6	6	6	6	6	6	4	1
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17	E	F	4	2	1	1	3	5	6	4	5	1	5	3	3	1	4	4	1	4	2	5	4	1	2	3	2	4	1 1

5	ection	1			Sect	ion II												Se	ction	111									
	D/E/N		II1	ll2	II3	114	115	II6	III1	III2	1113	1114	1115	1116	1117	1118	1119				11113	11114	11115	III16	11117	11118	11119	11120	III21
17	E	М	5	3	2	2	1	5	5	4	4	3	5	4	9	2	4	3	1	4	3	5	3	2	2	4	4	3	3
17	E	M	6	4	2	2	3	4	4	5	5	4	5	5	3	4	1	3	2	4	3	6	4	1	3	5	3	2	1
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99	<u>D</u>	M	6	6	4	6	6	6	5	6	6	5 6	5	6	9	<u>4</u>	- 2	5	4	5	ļ <del></del>	6	1	3	4	3	6	5	4
99	<u> </u>	M	5	5	4	4	6	3	6	<del></del>	3	3	5	ļ <del>,</del>	3	<u></u> 5	3	4	3	4	3	4	3	3	3	1 4	4	3	3
99	<u>D</u>	M	2	4	4	5	- <del>4</del>	6 3	<u>4</u>	<del>-4</del>	·	ა 6	5	6	9	6	4	5	<u> </u>	5	1 2	6	1	3	4	3	6	5	4
99	<u>P</u>	M	5	6	5	5 5	<u>-</u>	<u>S</u>		<del></del>	3	3	5	4	3	5	3	4	3	4	3	4	3	3	3	4	4	3	3
99	D	М	2	4	4	3	4	0_	4	4	3	<u>ა</u>	. 3		J							1_7							

# Appendix F

Se	ection	ı I			Sect	ion II												Se	ection	111								
Dep.	D/E/N	M/F	111	112	II3	114	115	116	1111	III2	1113	1114	1115	III6	1117	1118	III9	11110	11111	III12	11113	11114	11115	11116	1117	11118	11119	11120 11121
1	D	F	4	5	2	6	5	3	6	5	3	-5	6	4	6	5	4	6	5	5	6	3	2	3	4	6	6	6 4
1	D	М	5	5	3	5	4	4	4	4	4	3	5	4	5	4	4	4	3	4	4	3	2	3	3	3	5	4 4
1	D	М	5	4	3	6	6	2	5	4	2	4	5	3	5	4	3	5	4	4	5	1	1	2	3	5	5	5 3
2	D	F	6	4	4	5	4	5	5	5	4	2	6	6	6	4	4	4	3	4	4	3	3	4	4	4	4	4 4
2	D	F	4	4	2	6	5	4	5	4	2	4	5	3	5	4	3	5	4	4	5	3	2	2	3	5	5	5 3
2	D	М	- 4	4	2	6	6	4	4	5	3	5	6	4	6	5	4	6	5	5	6	3	2	3	4	6	6	6 4
2	D	М	5	5	3	6	4	3	6	4	2	4	5	3	5	4	3	5	4	4	5	3	1	2	3	5	5	5 3
3	D	F	4	4	2	5	5	2	5	4	2	4	5	3	5	4	3	5	4	4	5	2	1	2	3	5	5	5 3
3	D	M	5	5	3	6	6	4	5	5	3	5	6	4	6	5	4	6	5	5	6	3	2	3	4	6	6	6 4
6	D	F	2	1	1	2	2	3	6	1	1	4	4	1	1	1	1	1	1	1	1	1	1	1	2	4	1	1 1
6	D	F	4	5	2	6	4	4	5	4	2	4	5	3	5	4	3	5	4	4	5	2	1	2	3	5	5	5 3
6	D	F	4	4	2	6	5	4	5	4	2	4	5	3	5	4	3	5	4	4	5	2	1	2	3	5	5	5 3
6	D	F	5	4	3	6	5	4	5	4	2	4	5	3	5	4	3	5	4	4	5	1	1	2	3	5	5	5 3
6	D	M	6	6	3	5	6	6	6	6	6	5	6	6	6	5	5	4	6	5	3	6	3	6	4	6	6	5 5
6	D	М	5	-5	2	5	5	2	5	4	2	4	5	3	5	4	3	5	4	4	5	2	1	2	3	5	5	5 3
6	D	М	5	5	3	5	5	3	5	5	3	5	6	4	6	5	4	6	5	5	6	3	2	3	4	6	6	6 4
6	N	F	4	2	1	3	1	4	2	1	4	1	5	1	1	2	1	1	1	1	1	3	1	1.	1	1	4	1 1
6	N	М	5	1	1	1	1	6	1	3	1	1	5	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1 5
7	D	F	2	6	1	1	1	1	1	1	6	1	6	1	5	1	1	1	1	1	5	1	1	1	1	1	6	6 1
7	D	F	5	5	2	5	5	2	5	4	2	4	5	3	5	4	3	5	4	4	5	2	1	2	3	5	5	5 3
7	D	M	4	4	2	6	5	4	5	5	3	5	6	4	6	5	4	6	5	5	6	4	3	3	4	6	6	6 4
8	D	М	6	6	6	6	4	6	2	6	4	4	6	6	6	6	5	5	4	4	6	3	2	4	5	4	6	5 5
8	D	M	2	4	4	4	4	3	2	2	2	2	2	2	4	2	2	5	4	3	4	6	4	1	3	2	4	1 4
10	D	F	5	1	2	1	1	2	1	5	11	6	5	1	2	1	1	1	1	4	3	1	1	1	11	2	4	1 1
11	D	F	5	5	2	2	4	4	5	4	3	4	5	4	5	3	3	3	2	5	5	4	1	2	2	4	5	3 1
11	D	M	5	5	4	3	4	5	5	4	4	4	6	5	6	4	4	4	3	5	6	5	3	3	.3	5	5	4 2
11	E	M	3	3	3	5	2	5	6	4	5	3	5	5	4	1	4	3	11	2	2	6	4	2	3	4	3	2 2
11	E	M	6	4	3	3	4	4	4	5	5	4	5	5	4	4	1	3	3	4	3	6	4		3	5	3	2 2 6 5
13	D	F	6	5	3	6	6	6	5	5	6	6	6	5	6	6	6	5	2	5	5	1	1	4	6	3	6	
13	D	F	6	5	4	6	6	6	4	6	6	6	6	5	6	5	6	5	2	4	6	4	4	5	5	<u>6</u>	6	
13	D	<u>M</u>	5	4	2	5	5	5	3	4	5	5	5	4	<u>6</u>	4	5	4	2	4	5	3	1	4	4	5	6	6 4
14	E	F.	6	1	1	1	1	6	6	6	4	1	6	1	6	6	1	4	1	9	6	6	1		1	6	6	6 6
14	N.	F	5	5	1	1	1	1	5	11	2	11	6	5	1	1	1	2	11	4	2	1	1		1	1	2	2 1
15	<u>D</u>	F	6	6	1	4	5	6	5	2	4	5	6	1	6	3	4	4	4	4	5	1	1		4	4	4	3 1
16	D	M	5	4	2	4	2	3	5	4	4	3	6	4	6	3	3	3	2	4	3	3	2	3	3	4	4	4 2
16	D	M	5	4	3	4	2	3	4	4	4	3	6	4	6	3	3	3	2	4	3	3	2	3	3	4	4	4 2
16	D.	M	5	4	2	4	2	3	5	4	4	3	6	4	6	3	3	3	2	4	3	3	2	3	3	4	4	4 2
17	D	М	5	5	1	2	4	4	5	4	3	4	5	4	5	3	3	3	2	5	5	4	1	2	2	4	5	3 1
99	D	М	5	6	5	5	6	3	6	4	6	6	5	6	9	6	4	5	4	5	4	6	11	3	4	3	6	5 4
99	D	M	5	6	3	5	6	6	5	9	2	4	5	5	5	5	2	5	3	5	5	6	4	2	3	5	3	5 3

# Appendix G

**Survey Results ---- Current Employees** 

# Kirby Forensic Psychiatric Center

Staff Workplace Survey

1999

Results

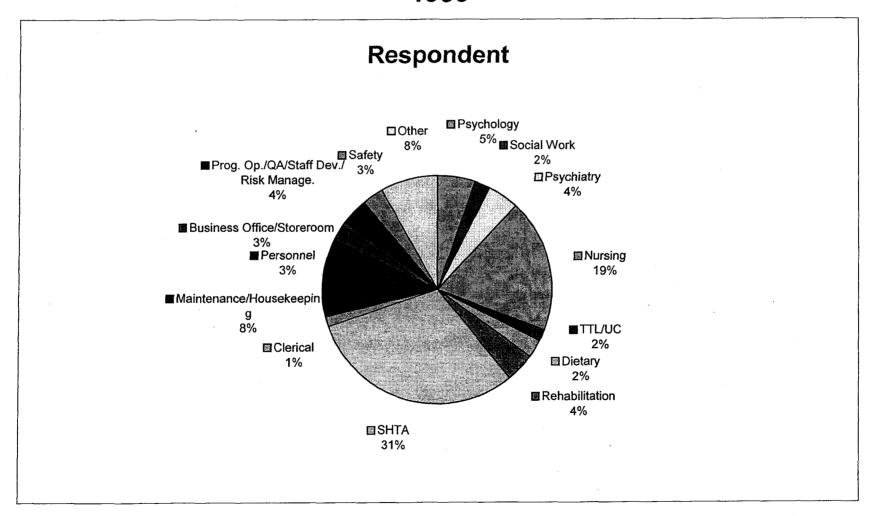
Presented by:

Office of Program Evaluation

### 9

# Kirby Forensic Psychiatric Center Staff Workplace Survey 1999

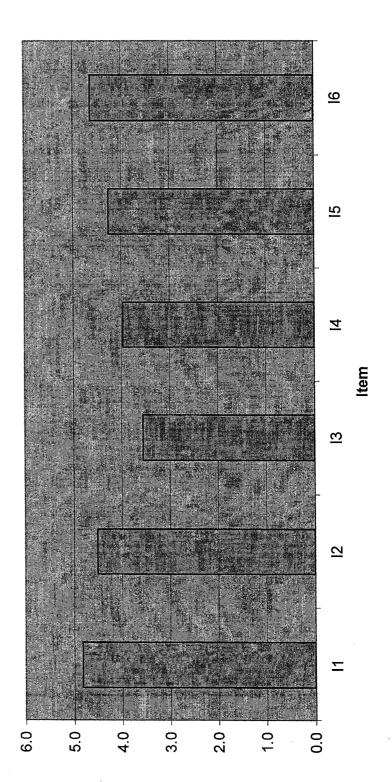
	Respondent	%
Psychology	13	5.16%
Social Work	6	2.38%
Psychiatry	11	4.37%
Medicine	0	0.00%
Pharmacy	0	0.00%
Nursing	48	19.05%
TTL/UC	4	1.59%
Dietary	6	2.38%
Dental	0	0.00%
Rehabilitation	11	4.37%
SHTA	77	30.56%
Clerical	3	1.19%
Maintenance/Housekeeping	21	8.33%
Personnel	7	2.78%
Business Office/Storeroom	7	2.78%
Prog. Op./QA/Staff Dev./ Risk Manage.	10	3.97%
Safety	8	3.17%
Other	20	7.94%
TOTAL	252	100.00%



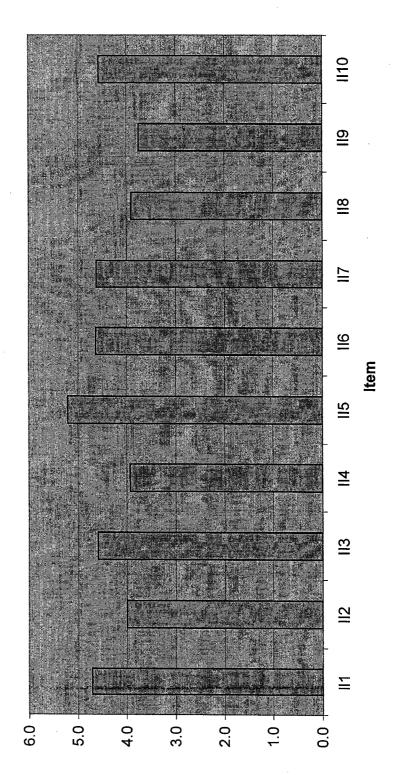
1999

												<u>0</u>	333														
			Section	tion	_											Se	Section	=									
Dep.	7	12	13	4	15	91	Ξ	112	113	114	115	116	117	811	611	1110	1111	1112	113	1114	1115	1116	1117	1118	1119	1120	1121
Psychology	3.8	2.8	2.5	3.1	3.0	1.8	4.6	3.4	3.1	2.2	4.5	5.2	3.8	2.5	2.5	4.4	2.2	4.1	2.5	4.4	2.7	2.6	2.0	3.9	3.6	2.7	2.1
Social Work	3.8	4.7	2.2	2.5	2.2	2.8	2.8	2.8	4.8	1.3	5.8	3.3	5.3	2.3	2.3	2.3	7.8	2.3	4.3	1.8	-8.	2.3	2.3	2.3	4.8	4.8	2.3
Psychiatry	5.2	4.8	5.4	5.0	4.2	5.0	5.5	4.8	4.6	4.6	5.7	5.5	4.8	4.5	4.6	5.0	3.3	4.3	3.9	3.6	3.4	4.3	5.0	4.5	5.0	4.3	4.3
Nurse	4.4	3.3	2.3	2.3	2.8	4.1	3.8	3.2	3.6	2.2	4.9	2.7	2.6	2.6	2.2	2.7	1.5	3.5	2.4	3.9	4.8	1.7	1.8	2.9	3.3	2.5	2.6
H	4.8	4.5	3.5	4.5	4.8	4.3	5.3	4.3	4.8	3.8	5.3	5.3	4.8	4.3	3.8	5.3	4.3	4.8	3.8	5.3	3.8	3.8	4.3	3.8	3.8	3.8	4.3
Dietary	3.8	5.2	3.2	3.7	4.7	3.8	4.3	3.8	3.8	5.3	4.8	5.3	4.3	3.8	2.8	5.8	4.3	4.8	4.8	5.8	4.3	3.3	8.4	4.8	5.8	4.8	2.8
Rehab.	4.8	4.9	4.5	4.5	4.6	5.4	5.0	3.6	4.6	3.8	4.5	4.4	4.4	3.8	2.9	4.2	3.1	4.7	3.6	5.2	3.8	2.9	3.5	3.8	5.5	4.1	4.5
SHTA	4.9	2.8	4.2	2.7	3.8	4.7	4.3	4.2	4.6	3.4	5.2	4.3	4.1	3.5	3.7	4.2	2.8	4.6	3.3	5.2	4.2	3.1	3.5	4.2	3.9	3.3	2.6
Clerical	5.3	5.0	4.0	5.0	4.3	5.0	4.3	3.7	4.3	4.3	5.0	4.0	5.3	4.7	4.0	4.3	4.0	4.0	5.3	5.5	5.5	3.7	4.3	5.0	5.7	5.0	3.7
Maint./HSK	5.5	5.4	4.7	5.4	5.1	5.7	4.8	5.2	5.6	4.8	5.5	5.4	5.4	5.4	5.4	5.6	4.6	5.0	5.0	5.2	4.5	4.6	4.8	5.2	5.4	5.0	5.5
Personnel	5.9	5.6	3.4	4.4	5.6	5.6	5.6	4.4	5.6	5.6	5.6	5.6	5.6	4.4	5.6	5.6	3.4	5.7	5.7	5.7	4.9	5.6	5.6	5.6	5.6	3.7	1.3
Buss.	5.1	4.9	3.1	4.1	5.0	5.1	5.1	4.0	4.9	4.9	5.0	4.7	5.1	4.3	4.6	4.9	3.4	4.7	5.1	5.3	4.4	4.6	4.7	5.1	5.3	3.7	1.7
Prog. Op.	5.8	5.5	3.6	5.6	5.8	9.0	5.4	4.7	5.8	5.3	6.0	5.0	5.5	4.2	4.7	5.4	4.6	5.7	4.4	5.8	4.5	5.3	4.3	4.7	5.0	3.9	4.0
Safety	4.9	3.1	2.9	1.9	2.9	4.6	4.8	4.1	4.5	3.5	5.0	4.0	3.8	3.4	3.5	4.0	2.3	4.8	3.1	4.8	3.8	2.6	3.4	3.9	3.6	3.1	2.3
Other	4.4	5.2	3.8	4.8	5.1	5.6	5.1	3.7	4.3	4.0	5.3	4.8	4.5	4.9	3.6	4.8	3.5	5.0	4.1	5.1	3.0	3.5	3.7	4.4	4.7	4.3	3.5
Aveage Mean	4.8	4.5	3.6	4.0	4.3	4.6	4.7	4.0	4.6	3.9	5.2	4.6	4.6	3.9	3.7	4.6	3.3	4.5	4.1	4.8	3.8	3.6	3.9	4.3	4.7	3.9	3.2

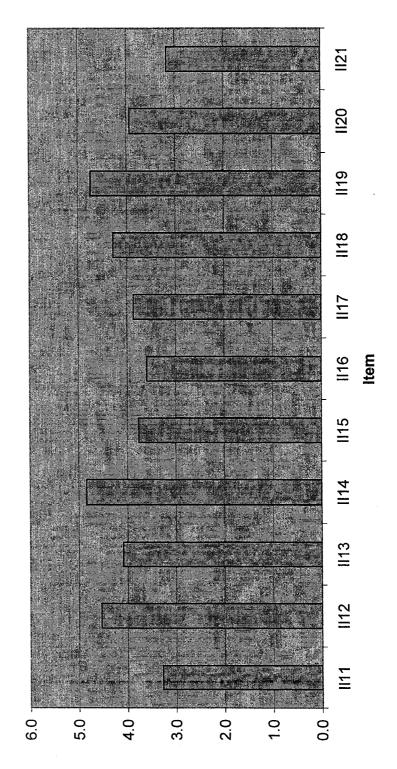
Aveage Mean Rating



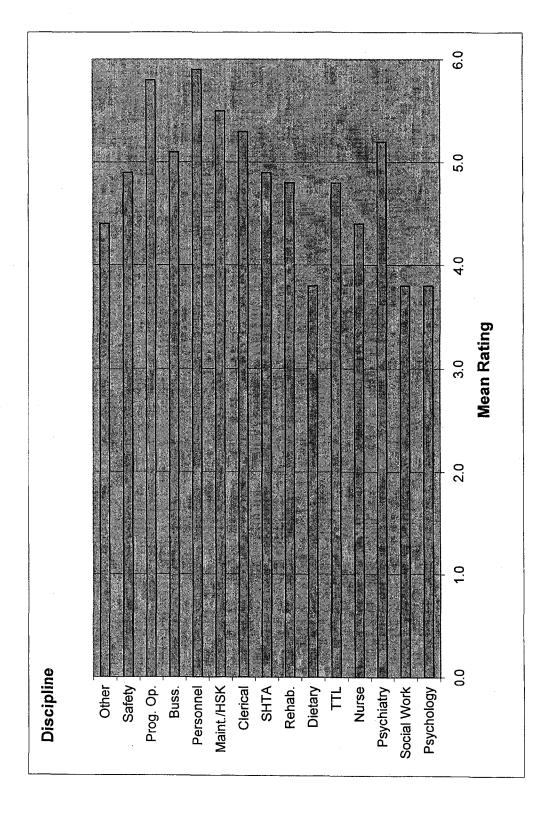
Average Mean Rating



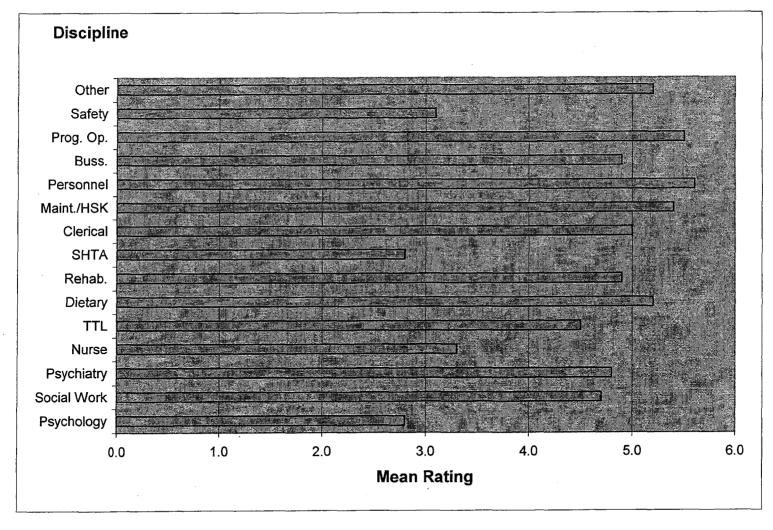
Average Mean Rating



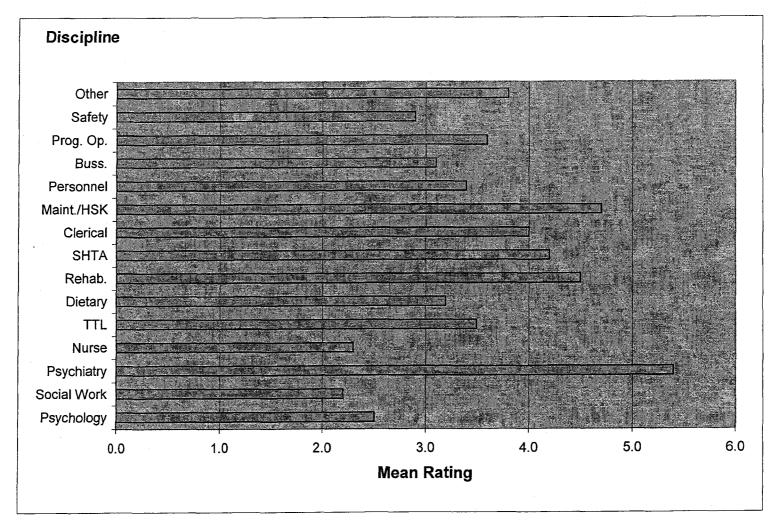
How satisfied are you with your co-workers?



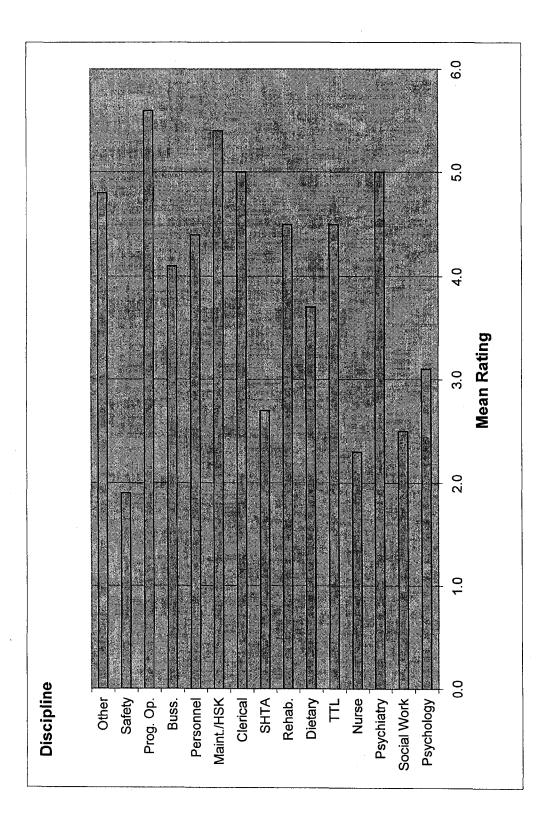
# How satisfied are you with your ability to have meaningful input into how you do your job?



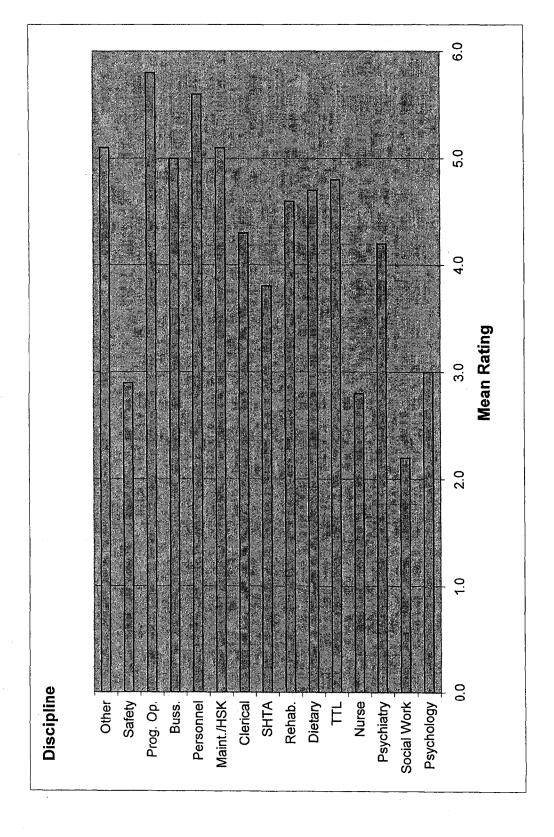
# How satisfied are you with your chances for advancement / promotion?



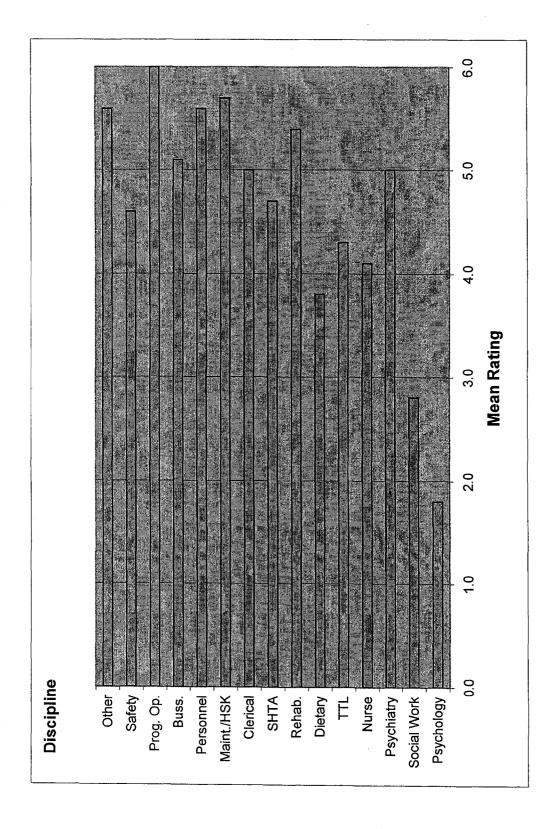
How satisfied are you with your access to needed training?



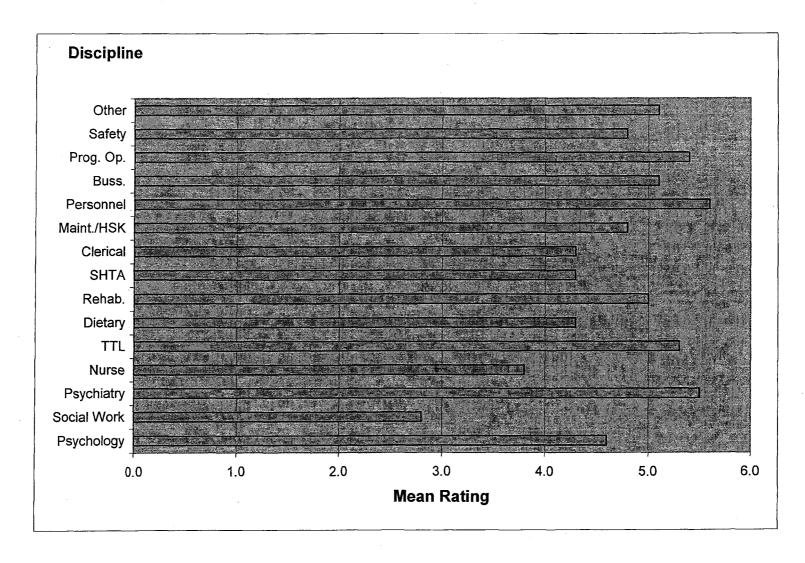
How satisfied are you with your job as a whole?



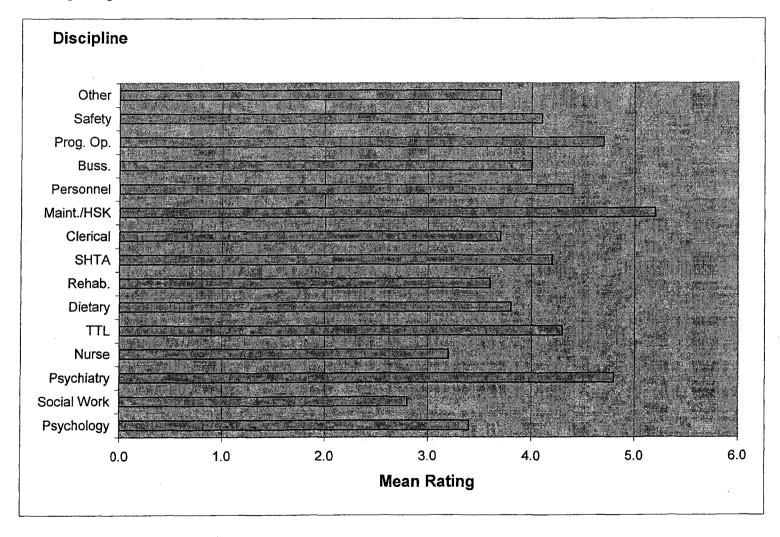
How satisfied are you with your immediate supervisor?



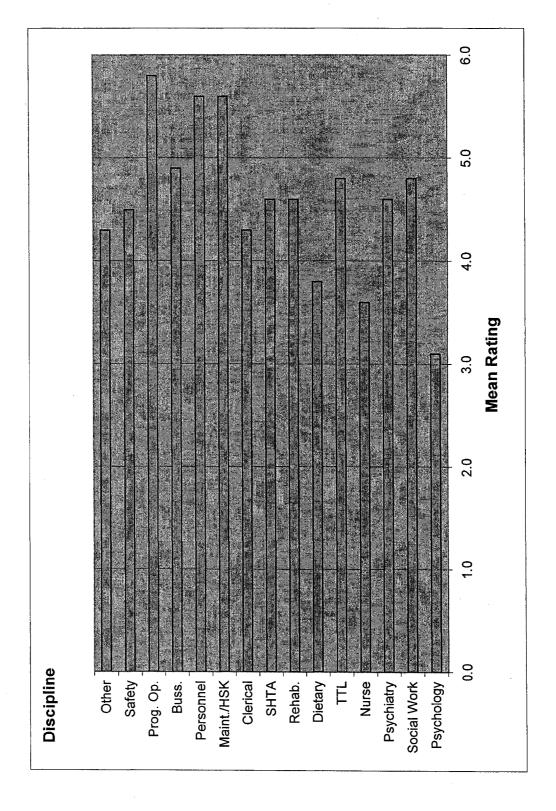
# The work is really challenging.



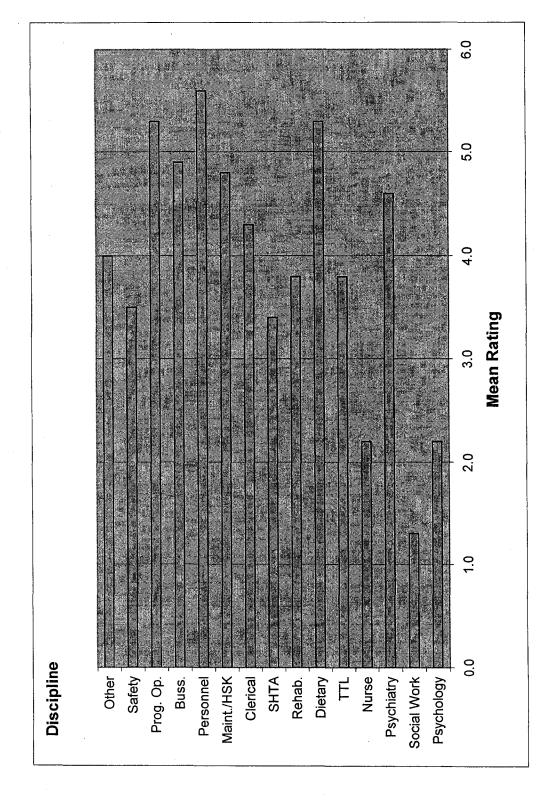
# Employees at KFPC go our of their way to help a new employee feel comfortable.



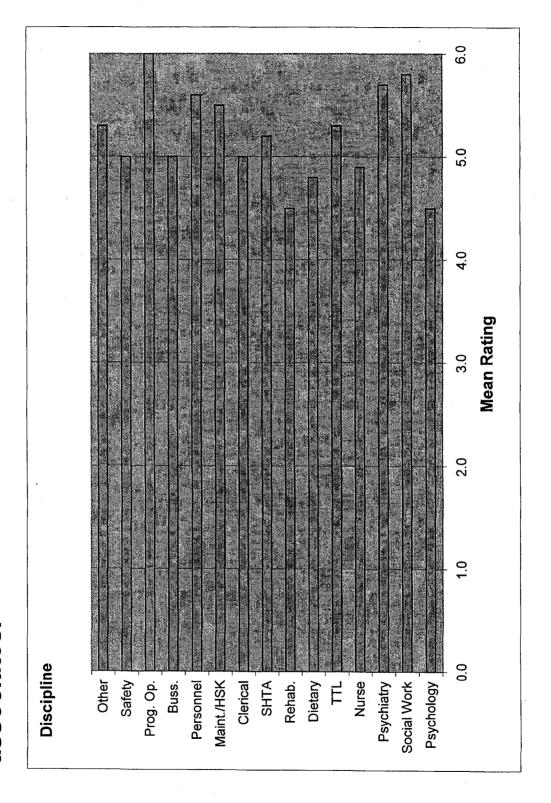
Supervisors treat me with respect.



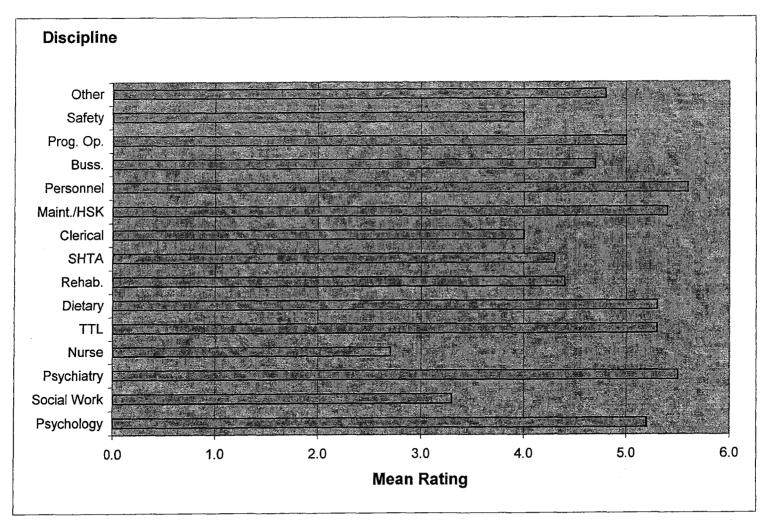
KFPC is a well-managed hospital.



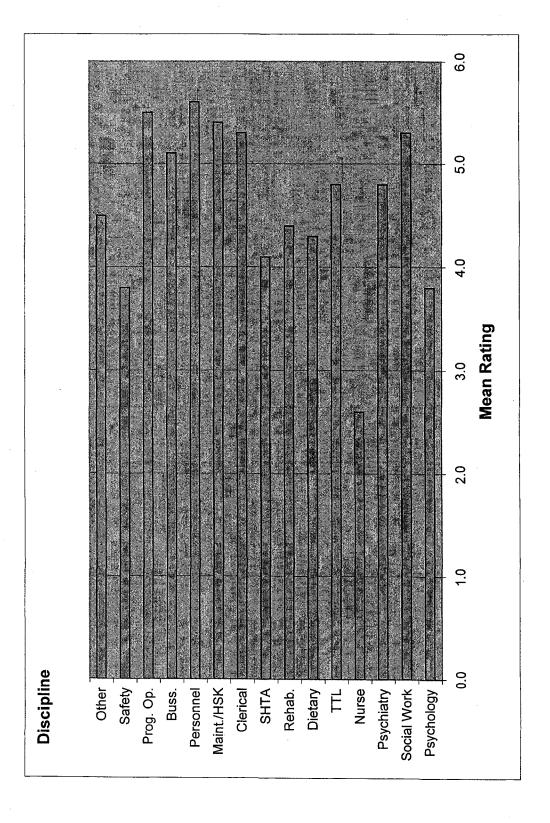
have a good working relationship with my co-workers associates.



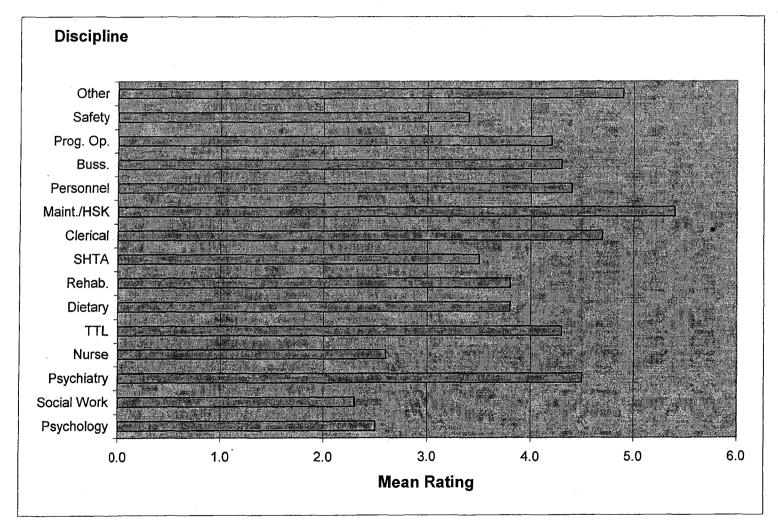
# I feel that people from diverse cultural backgrounds are well accepted within the organization.



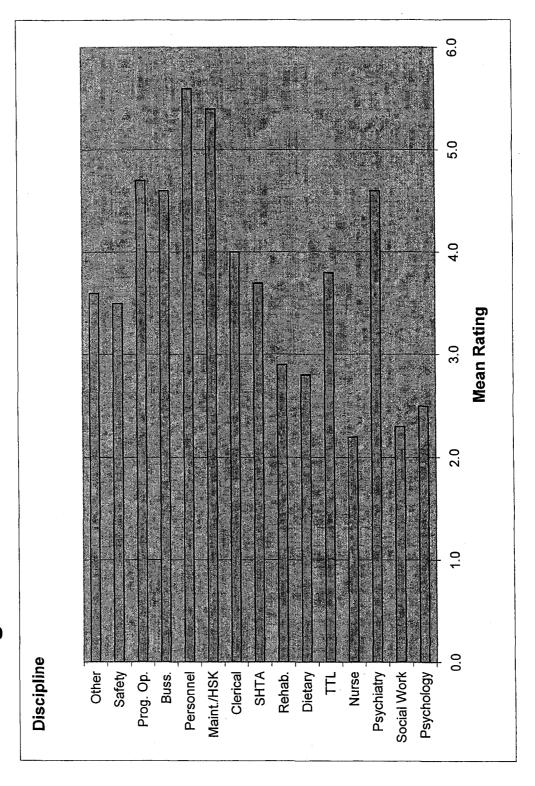
The employee orientation at KFPC is adequate.



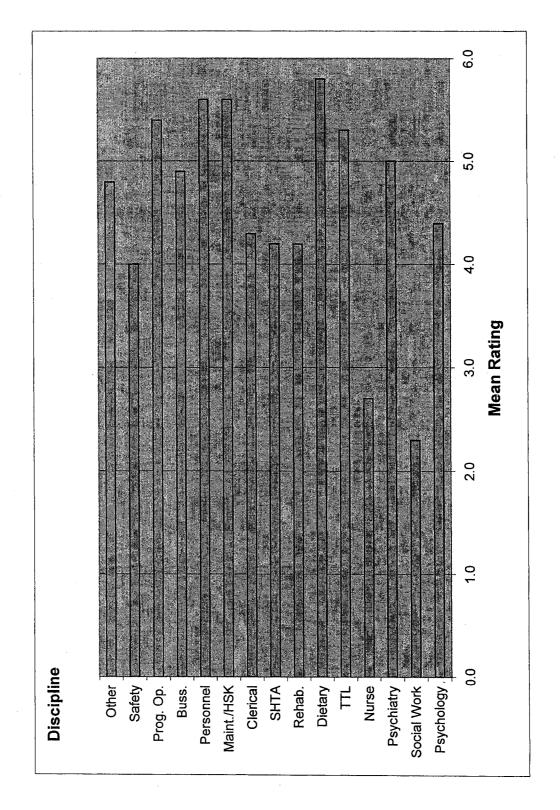
# I feel that information and changes affecting the operation of the hospital are effectively communicated to me.



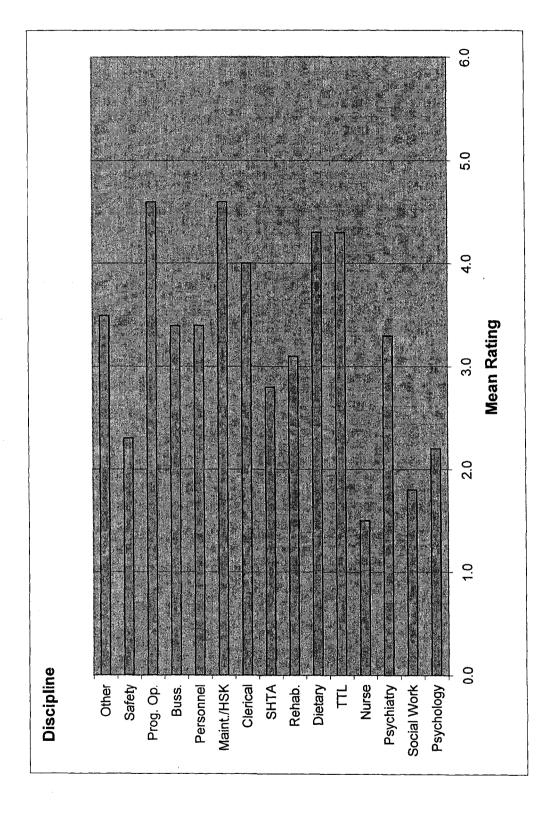
Superviors usually compliment employees who do something well.



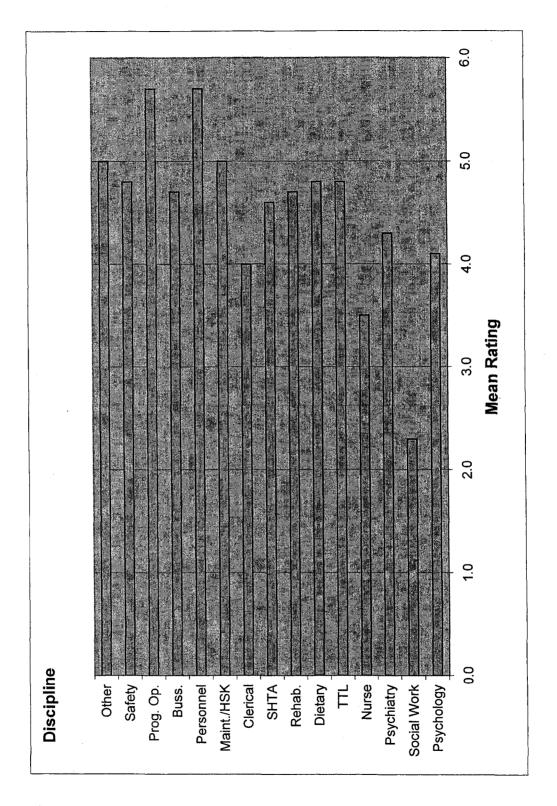
I am proud to work at KFPC.



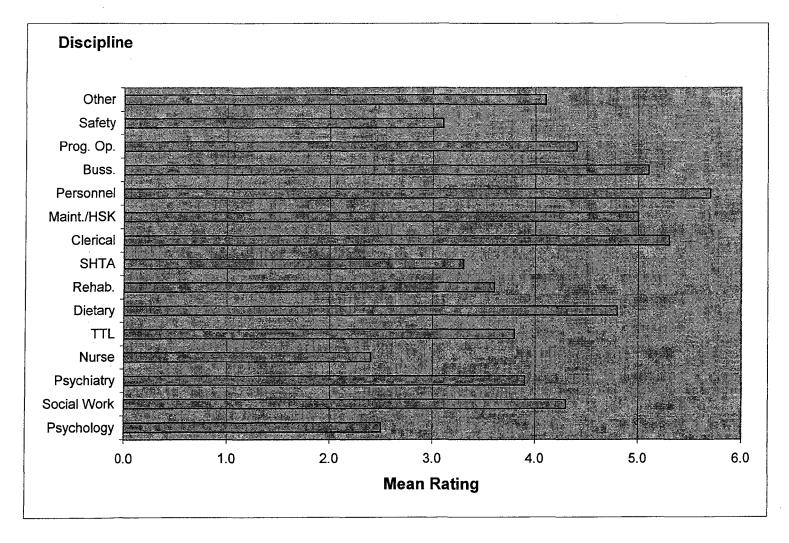
Employees are empowered to make their own decisions.



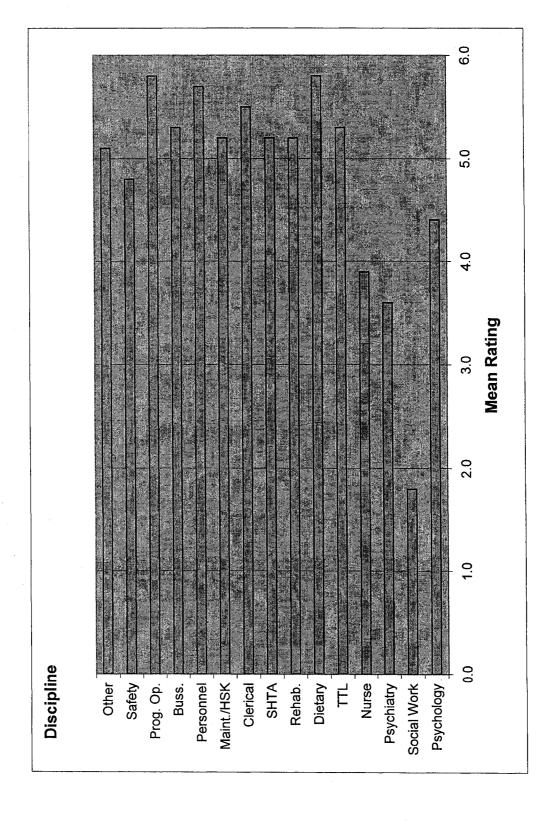
l enjoy my job.



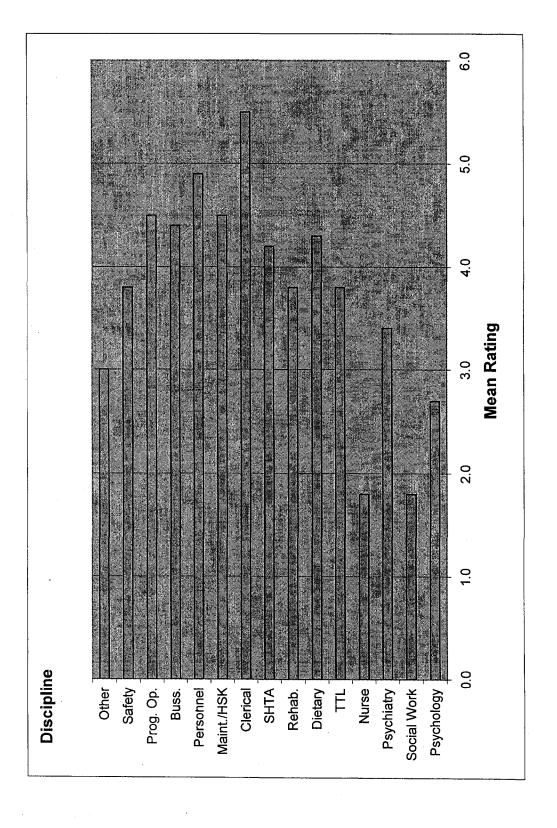
## Policies and regulations are generally clear and understandable.



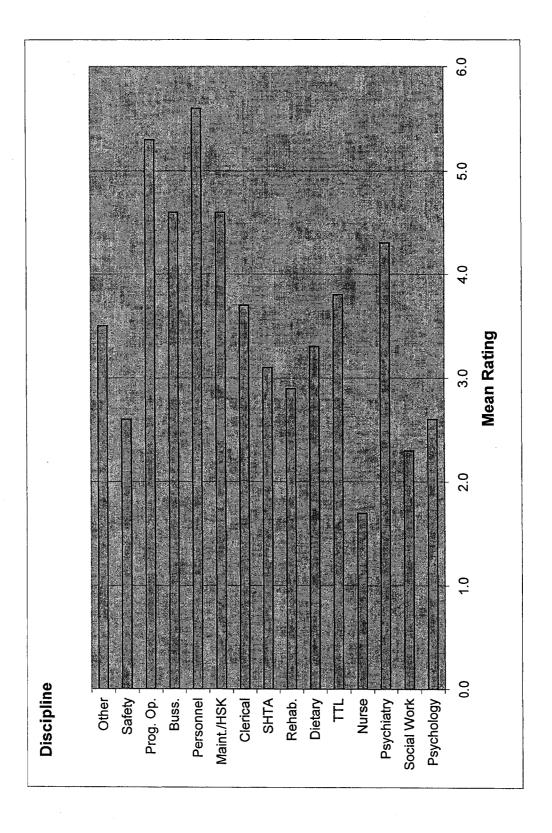
I will be working at KFPC one year from now.



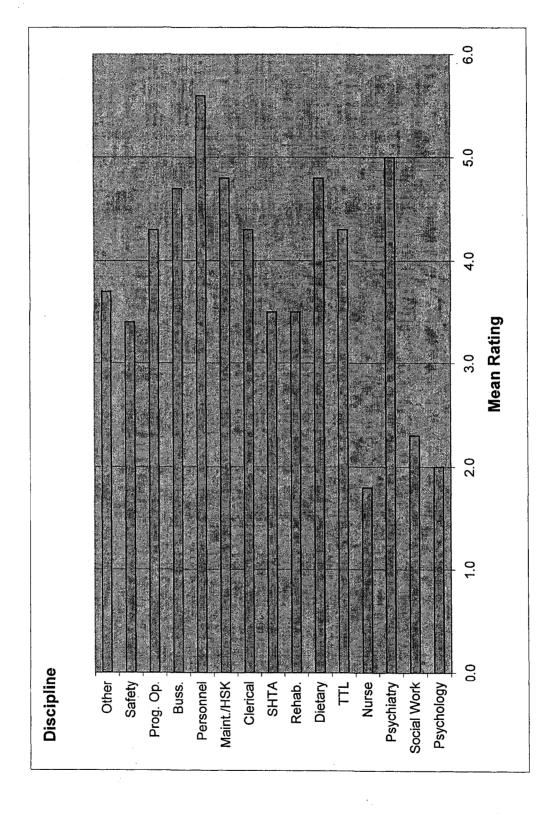
I will be working at KFPC five years from now.



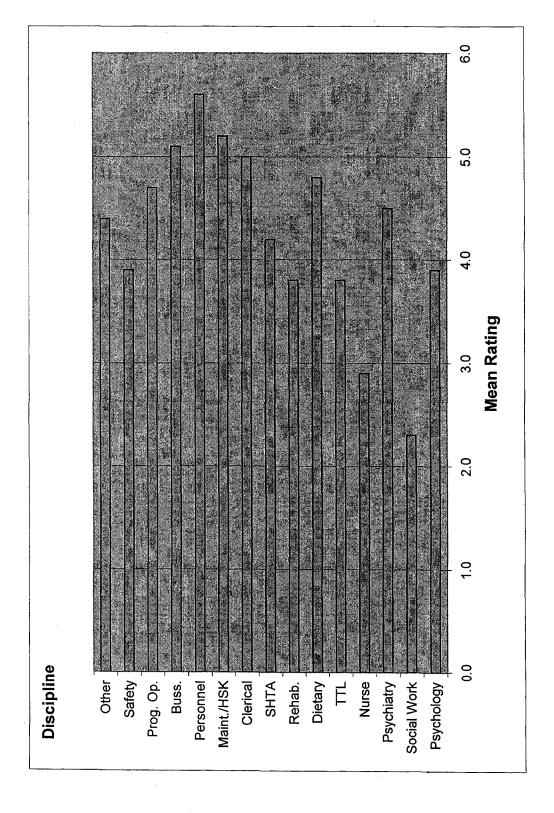
Hard work is appreciated and rewarded at KFPC.



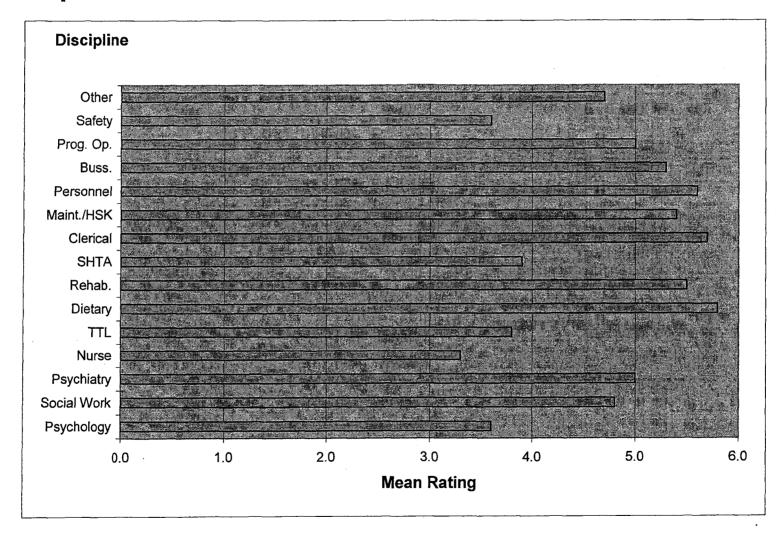
KFPC is a highly efficient, work-oriented place.



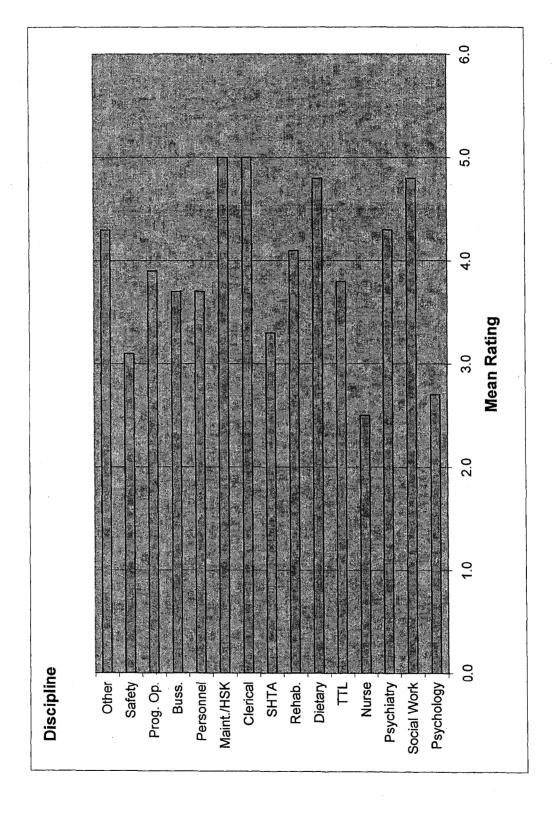
People put a lot of effort into what they do at KFPC.



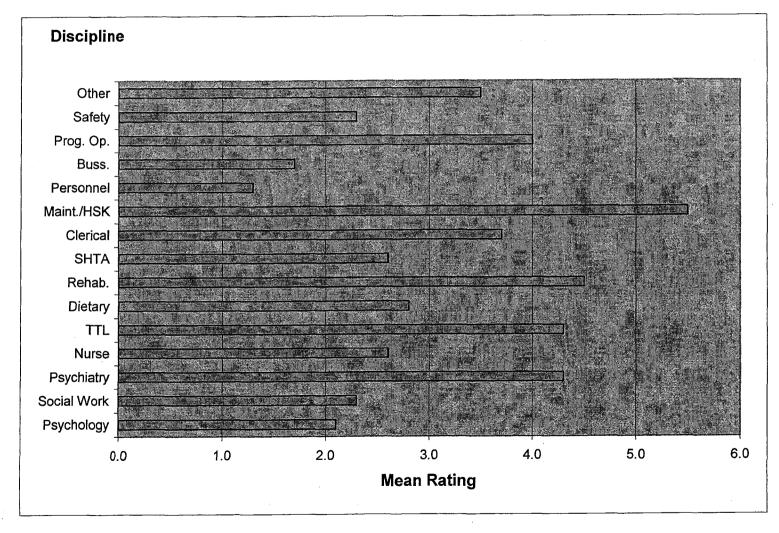
## My job function and responsibilities have been clearly explained to me and I understand them.



Rules and regulations are well enforced.



## Supervisors meet with employees regularly to discuss their future work goals.



#### Appendix H

Survey Results ---- Former Employees

# Kirby Forensic Psychiatric Center

Staff Workplace Survey

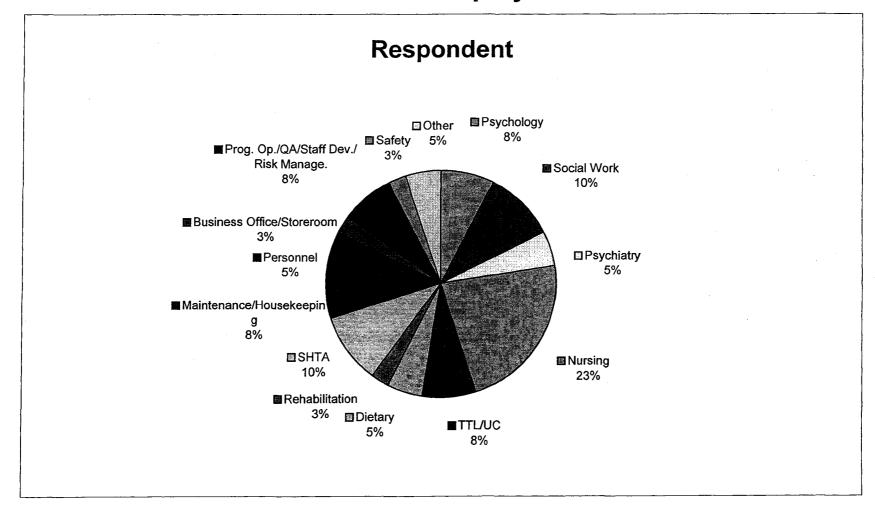
Former Employee

Results

H-1

#### Į,

,	Respondent	%				
Psychology	3	7.50%				
Social Work	4	10.00%				
Psychiatry	2	5.00%				
Medicine	0	0.00%				
Pharmacy	0 -	0.00%				
Nursing	9	22.50%				
TTL/UC	3	7.50%				
Dietary	2	5.00%				
Dental	0	0.00%				
Rehabilitation	1	2.50%				
SHTA	4	10.00%				
Clerical	0	0.00%				
Maintenance/Housekeeping	3	7.50%				
Personnel	2	5.00%				
Business Office/Storeroom	1	2.50%				
Prog. Op./QA/Staff Dev./ Risk Manage.	3	7.50%				
Safety	1	2.50%				
Other	2	5.00%				
TOTAL	40	100.00%				

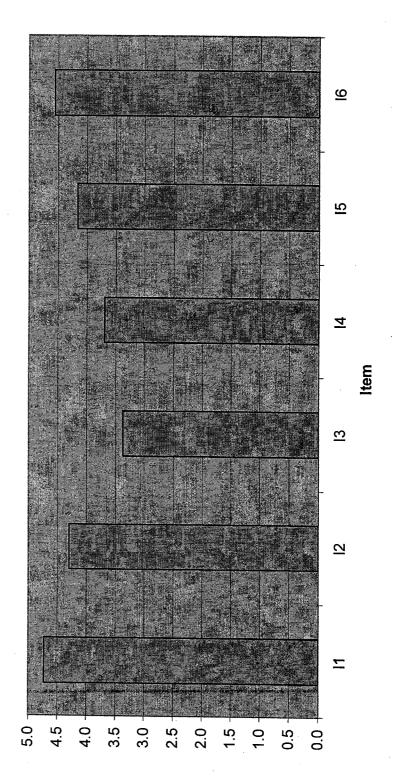


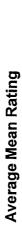
### Kirby Forensic Psychiatric Center Staff Workplace Survey

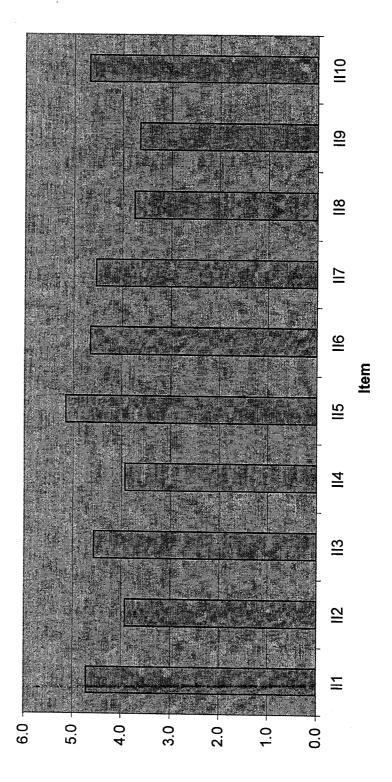
Former Employee

[		Section I							Section II																			
[	Dep.	11	12	13	14	15	16	111	112	113	114_	115	116	117	118	119	1110	1111	1112	1113	ll14	1115	II16	1117	1118	II19	1120	II21
	Psychology	3.63	2.63	2.38	2.75	2.75	1.75	4.63	3.13	3.00	2.25	4.38	6.00	3.75	2.50	2.38	5.50	2.25	4.00	2.50	5.38	2.50	2.63	2.00	3.75	3.50	4.25	1.88
	Social Work	3.75	4.50	2.00	2.25	2.00	2.75	2.75	2.75	4.75	1.25	5.75	3.25	5.25	2.25	2.25	2.25	1.75	2.25	4.25	1.75	1.75	2.25	2.25	2.25	4.75	4.75	2.25
	Psychiatry	5.14	4.86	5.29	4.86	4.14	5.14	5.57	4.71	4.71	4.71	5.71	5.57	4.57	4.57	4.71	5.14	3.14	4.29	3.86	4.14	4.00	4.29	5.14	4.29	5.14	4.29	4.29
	Nurse	4.41	3.06	2.29	2.29	2.85	4.03	3.85	3.18	3.65	2.18	4.85	2.68	2.59	2.53	2.21	2.74	1.47	3.50	2.32	4.35	3.03	1.71	1.76	2.91	3.29	2.44	2.59
	TTL	4.50	4.00	3.00	4.00	4.50	4.00	5.00	4.00	4.50	3.50	5.00	5.00	4.50	4.00	3.50	5.00	4.00	4.50	3.50	5.00	3.00	3.50	4.00	3.50	3.50	3.50	4.00
표	Dietary	3.75	5.00	3.00	3.50	4.50	3.75	4.25	3.75	3.75	5.25	4.75	5.25	4.25	3.75	2.75	5.75	4.25	4.75	4.75	5.75	4.00	3.25	4.75	4.75	5.75	4.75	2.75
4	Rehab.	4.60	4.60	4.20	4.20	4.40	5.20	4.80	3.40	4.40	3.60	4.40	4.20	4.20	3.60	2.60	4.00	2.80	4.60	3.40	5.00	4.60	2.60	3.20	3.60	5.40	3.80	4.40
	SHTA	4.92	2.77	4.18	2.68	3.80	4.74	4.34	4.23	4.65	3.38	5.15	4.31	4.43	3.46	3.68	4.18	2.85	4.63	3.34	5.18	4.08	3.15	3.46	4.25	3.92	3.32	2.65
	Maint./HSK	5.50	5.00	4.50	4.75	4.88	5.63	4:75	5.00	5.63	4.88	5.38	5.25	5.13	5.25	5.38	5.38	4.25	4.88	4.63	5.88	5.25	4.75	4.50	5.25	5.13	4.88	5.38
	Personnel	5.80	5.40	3.20	4.20	5.40	5.40	5.40	4.20	5.40	5.40	5.40	5.40	5.40	4.20	5.40	5.40	3.20	4.00	5.60	5.60	4.40	5.40	5.40	5.40	5.40	3.60	1.40
Į	Buss.	5.14	4.86	3.14	4.14	5.00	5.14	5.14	4.00	4.86	4.86	5.00	4.71	5.14	4.29	4.57	4.86	3.43	4.71	5.14	5.29	4.43	4.57	4.71	5.14	5.29	3.71	1.71
Ĺ	Prog. Op.	5.75	5.25	3.50	5.50	5.94	5.93	5.75	4.50	5.75	5.63	5.88	4.75	5.50	4.00	4.50	5.85	4.25	5.91	4.50	5.98	5.73	5.25	4.25	4.50	4.75	3.75	3.75
1	Safety	4.88	3.13	2.88	1.88	2.88	4.63	4.75	4.13	4.50	3.50	5.00	4.00	3.75	3.38	3.50	4.00	2.25	4.75	3.13	4.75	3.75	2.63	3.38	3.88	3.63	3.13	2.25
	Other	4.43	5.07	3.64	4.71	5.14	5.64	5.07	4.00	4.36	4.00	5.36	4.71	5.00	4.79	3.64	4.86	3.50	5.07	4.14	5.14	3.07	3.64	3.79	4.50	4.71	4.21	3.29
	veage Mean	4.70	4.30	3.40	3.70	4.20	4.60	4.70	3.90	4.60	3.90	5.20	4.60	4.50	3.80	3.60	4.70	3.10	4.40	3.90	5.00	3.90	3.50	3.80	4.10	4.60	3.90	3.00

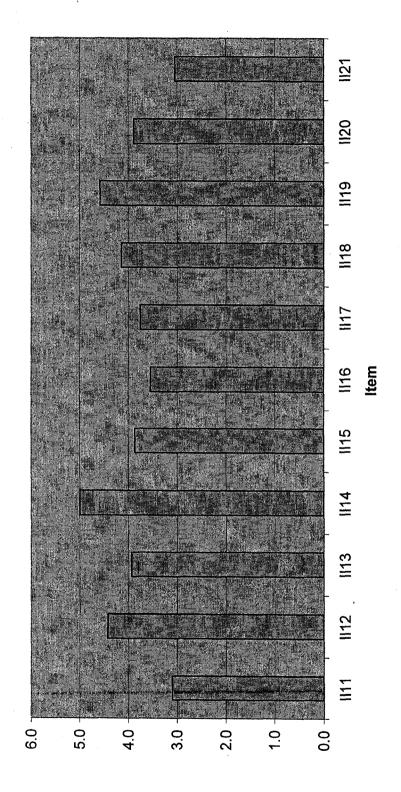
Aveage Mean Rating



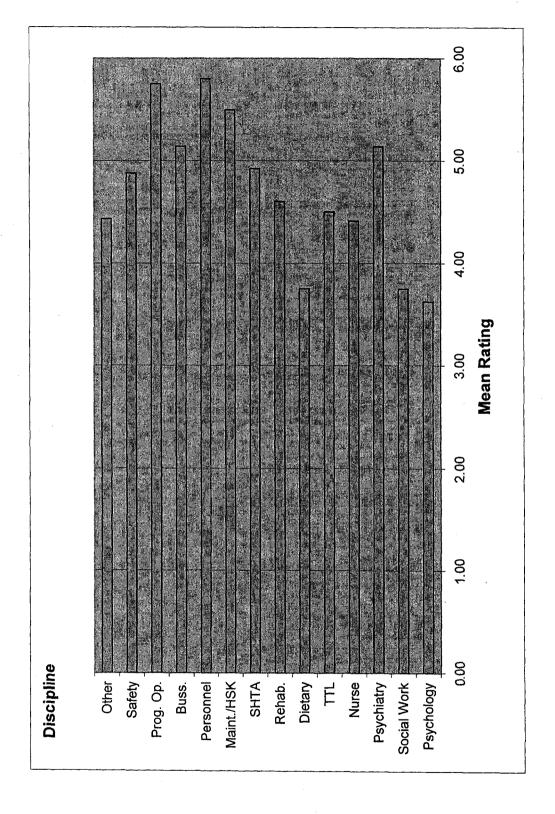




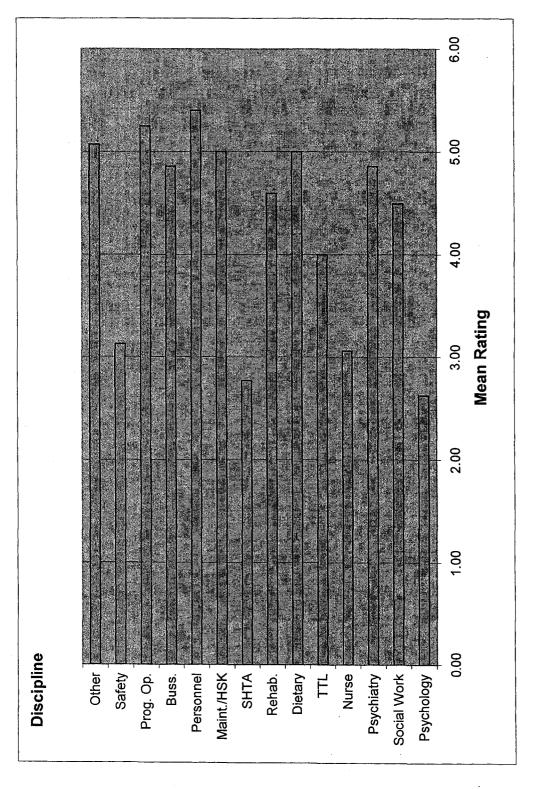
Average Mean Rating



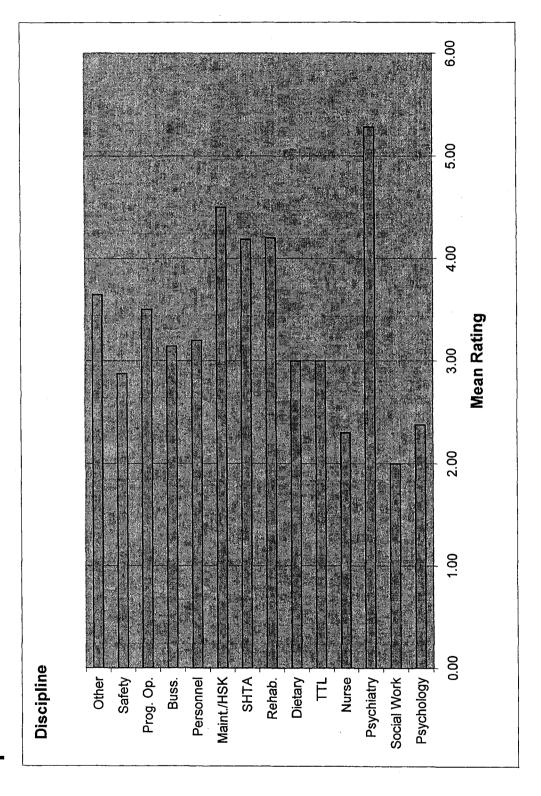
How satisfied are you with your co-workers?



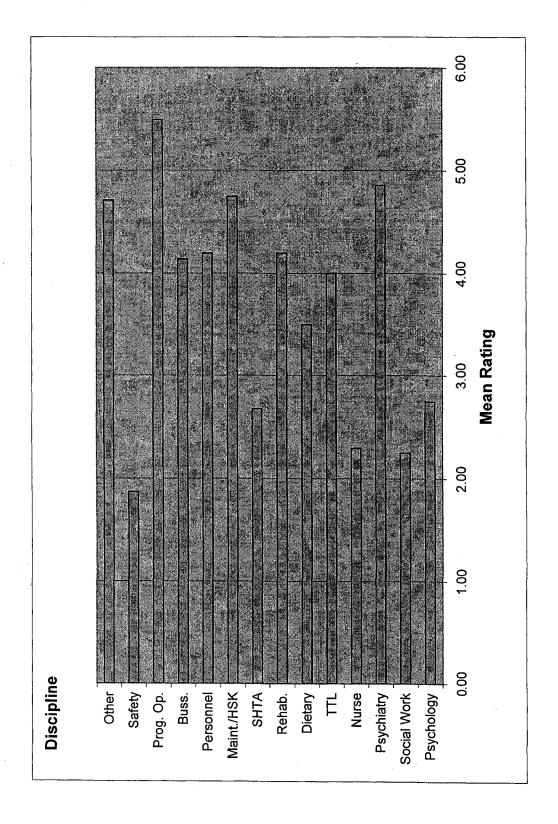
How satisfied are you with your ability to have meaningful input into how you do your job?



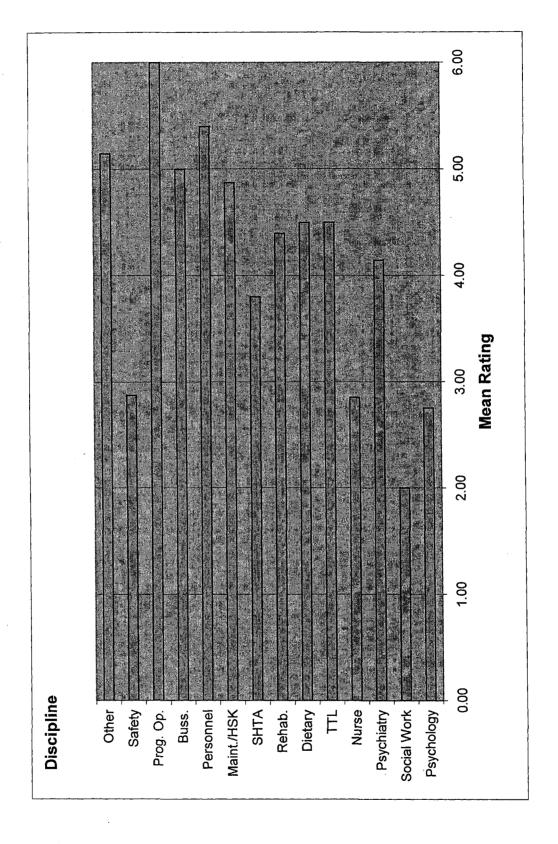
How satisfied are you with your chances for advancement promotion?



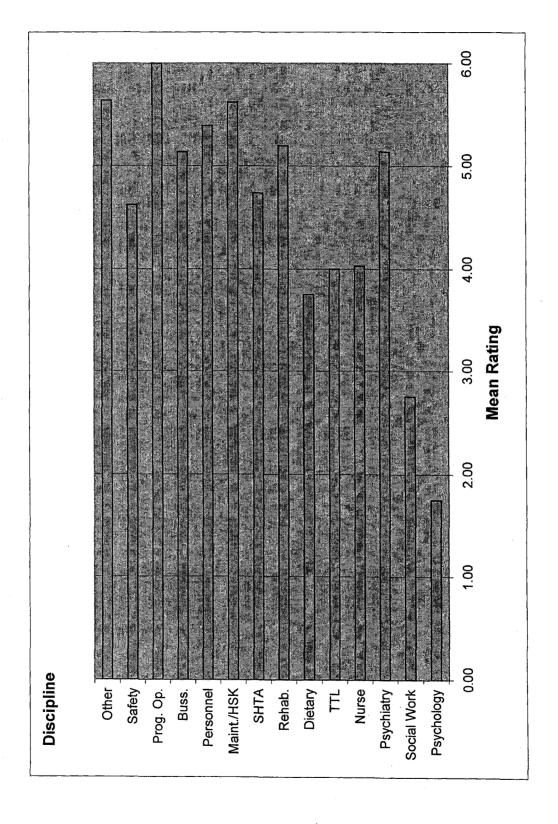
How satisfied are you with your access to needed training?



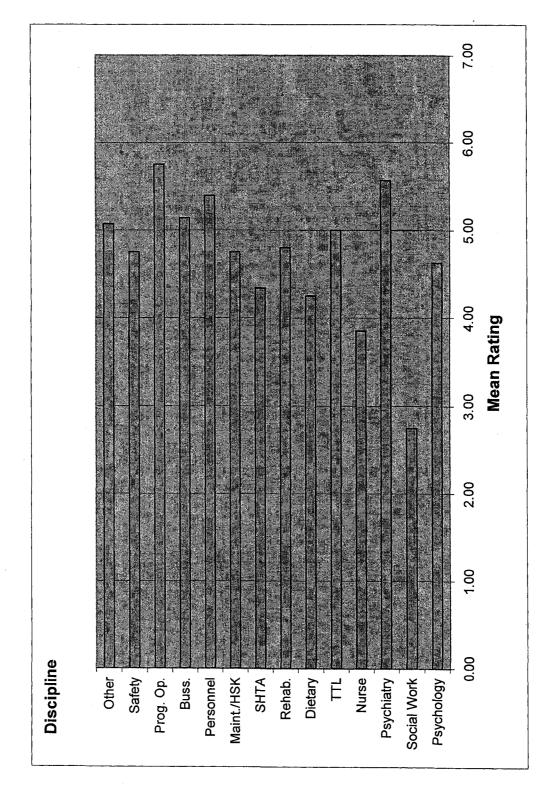
How satisfied are you with your job as a whole?



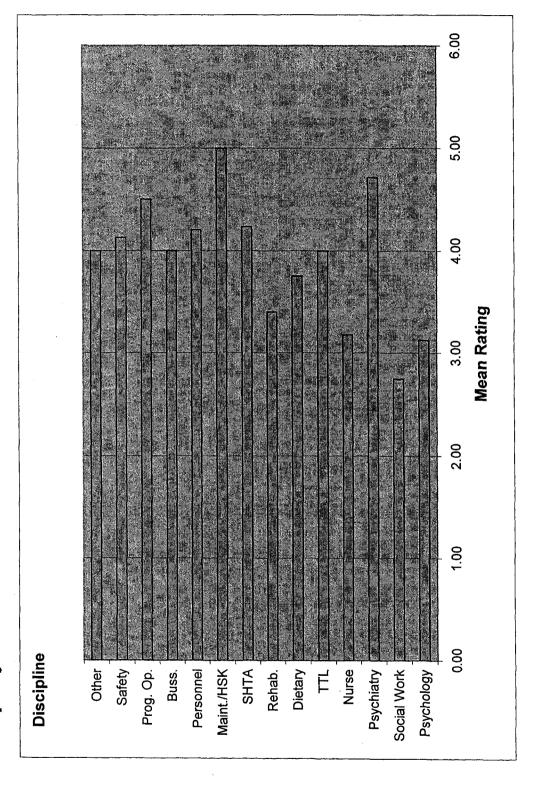
How satisfied are you with your immediate supervisor?



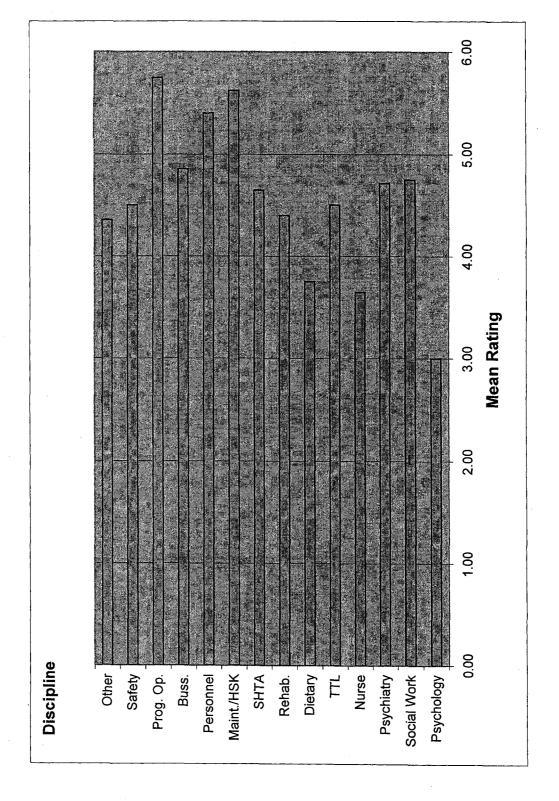
The work is really challenging.



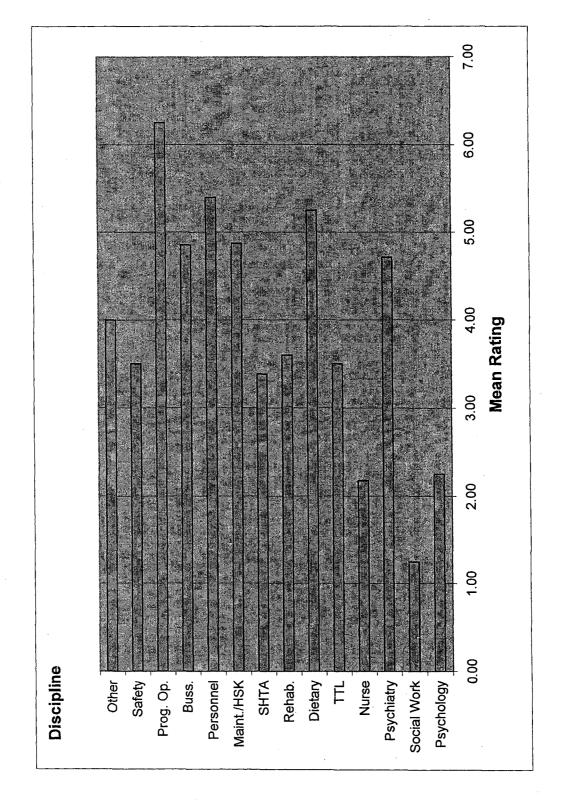
Employees at KFPC go our of their way to help a new employee feel comfortable.



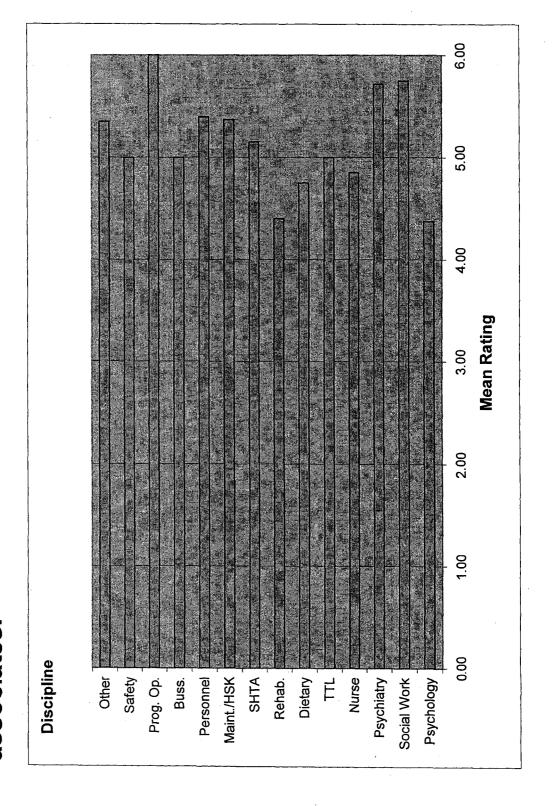
Supervisors treat me with respect.



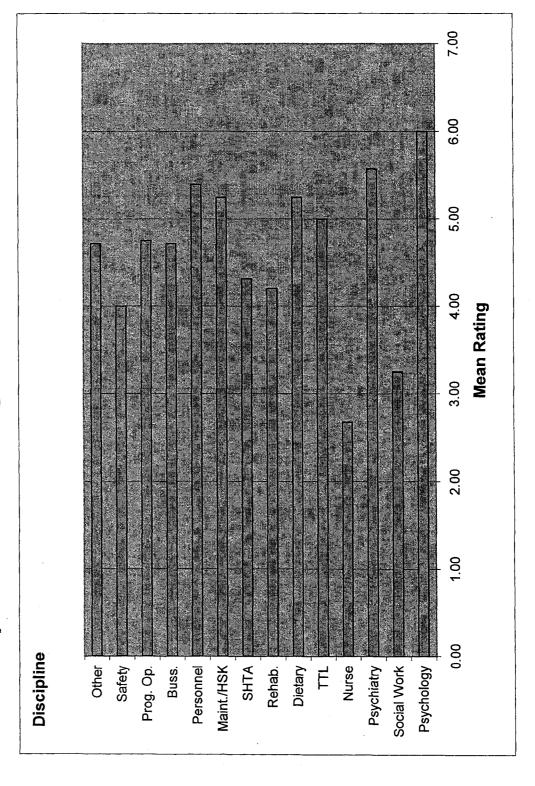
KFPC is a well-managed hospital.



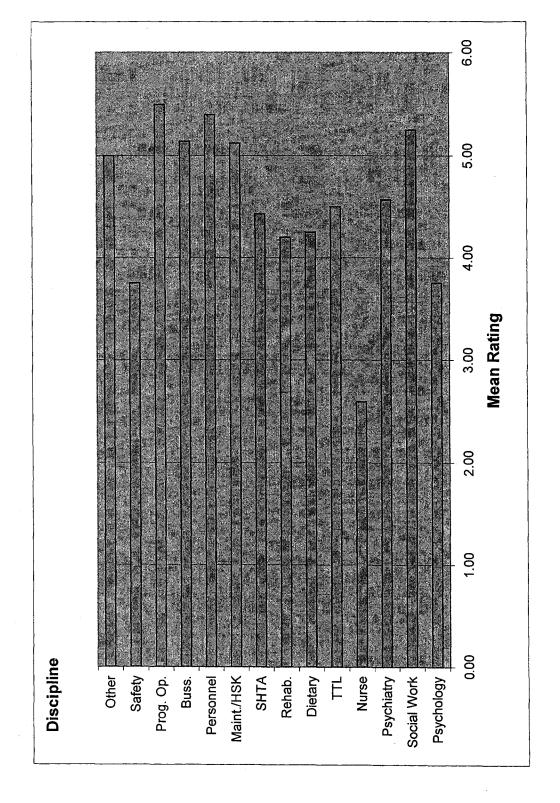
I have a good working relationship with my co-workers associates.



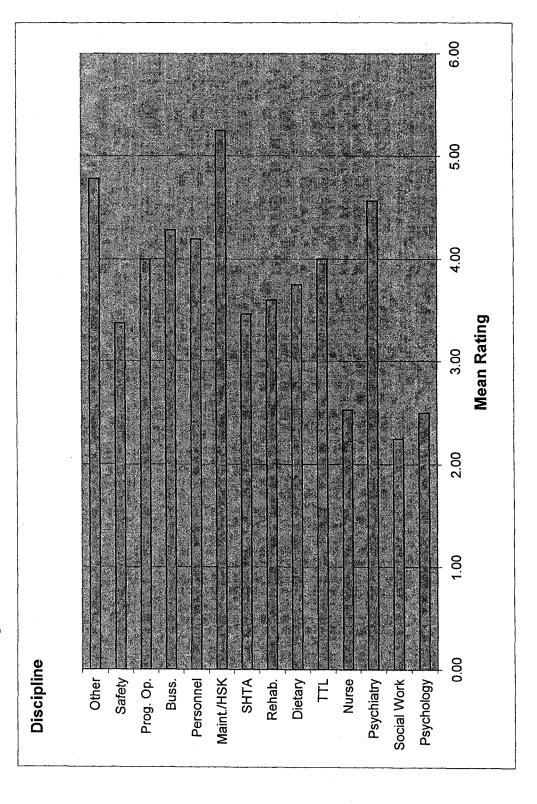
I feel that people from diverse cultural backgrounds are well accepted within the organization.



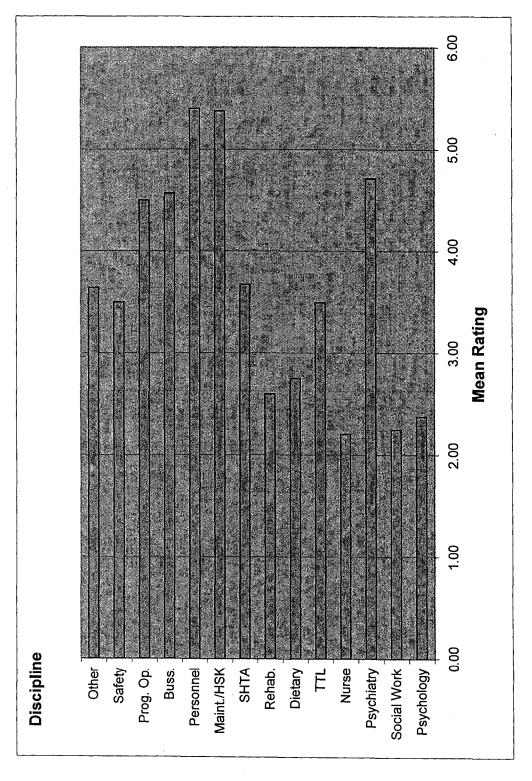
The employee orientation at KFPC is adequate.



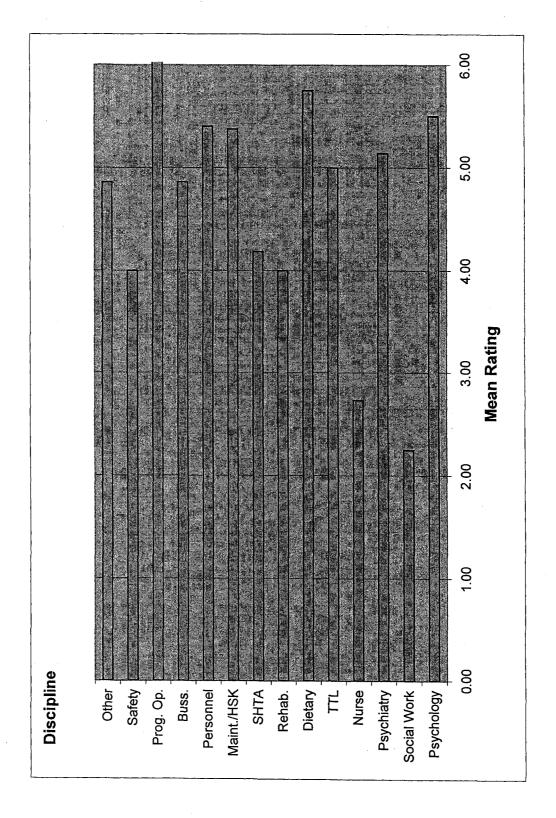
I feel that information and changes affecting the operation of the hospital are effectively communicated to me.



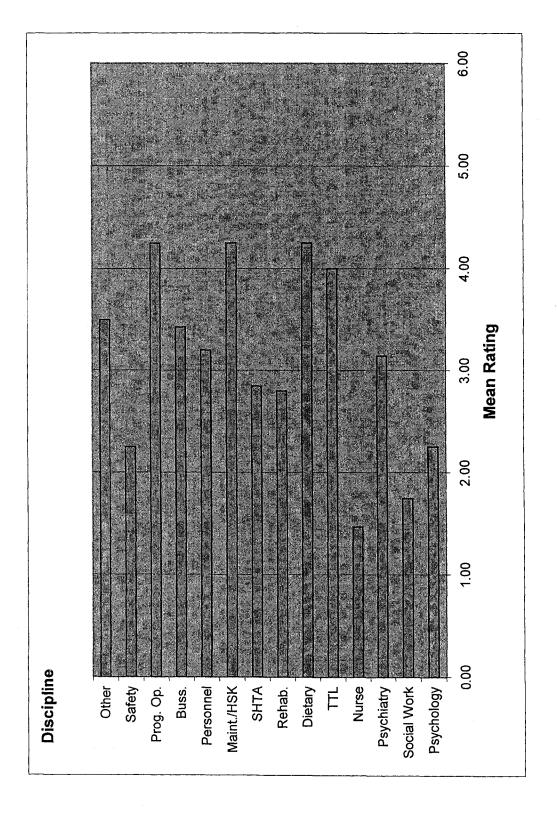
Superviors usually compliment employees who do something well.



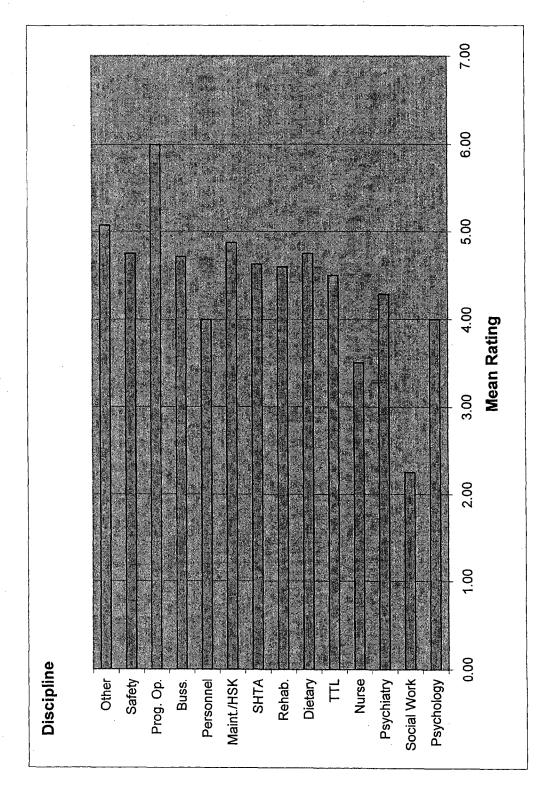
I am proud to work at KFPC.



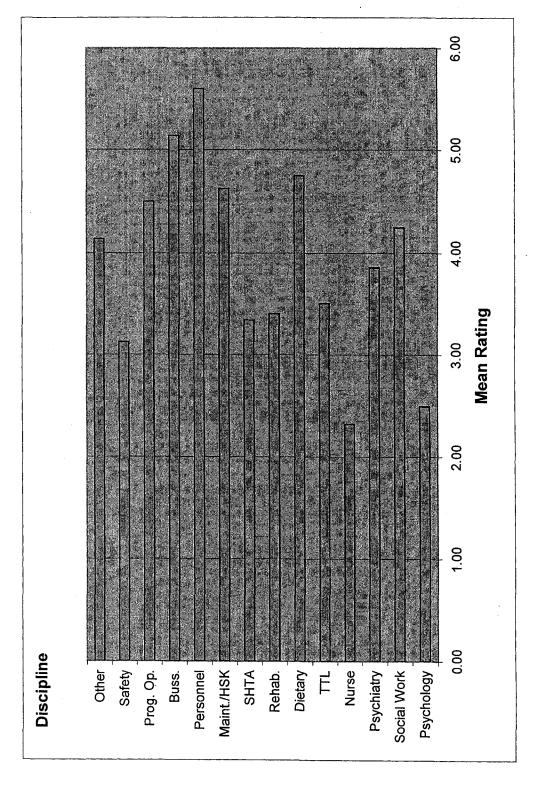
Employees are empowered to make their own decisions.



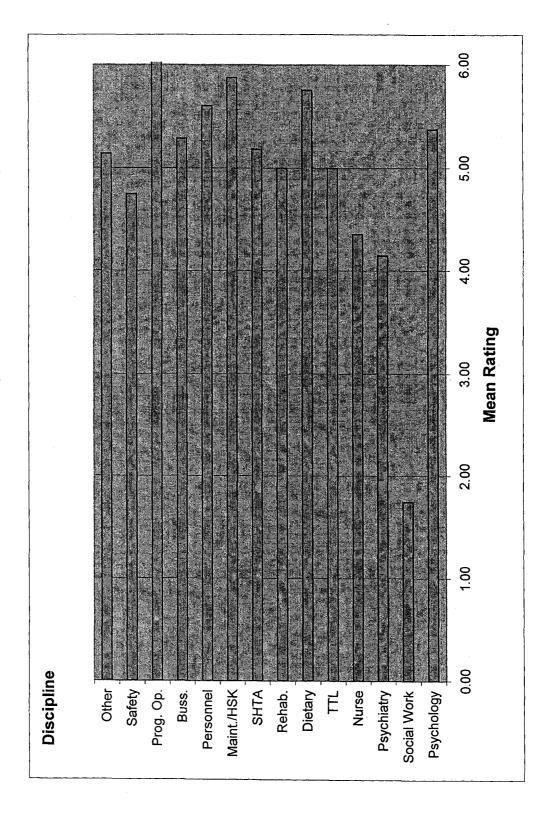
l enjoy my job.



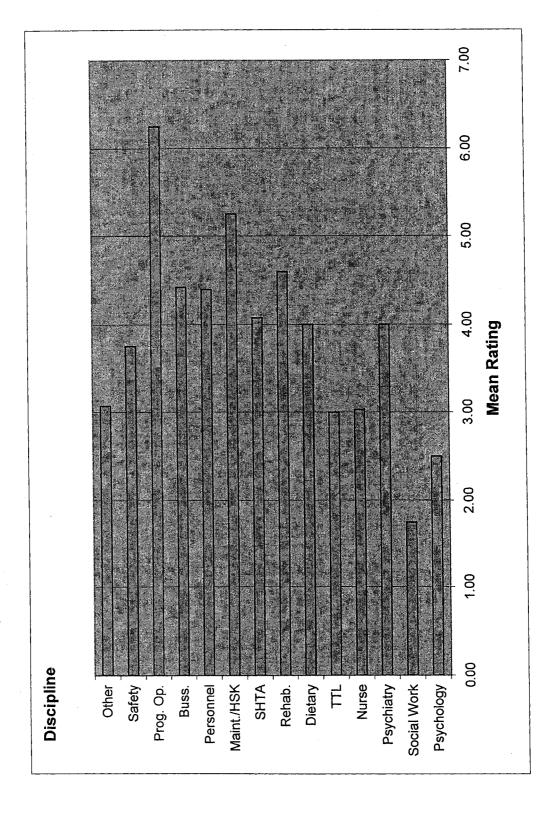
Policies and regulations are generally clear and understandable.



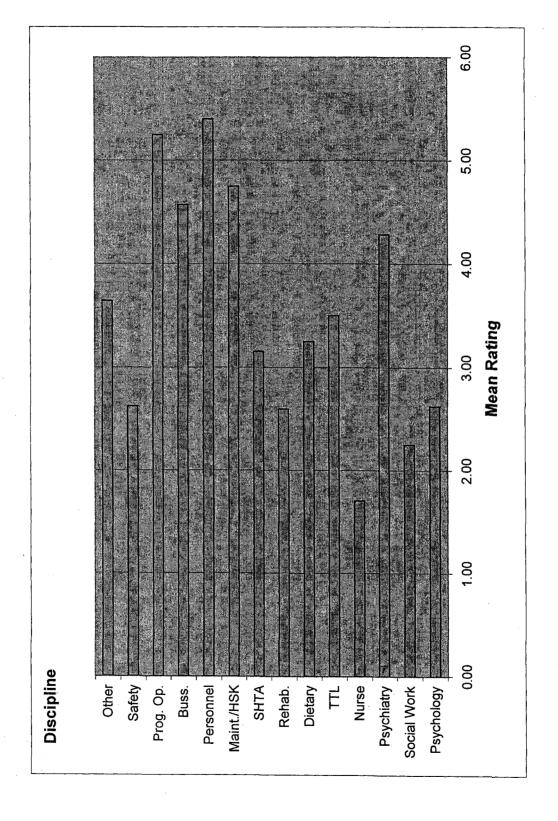
I will be working at KFPC one year from now.



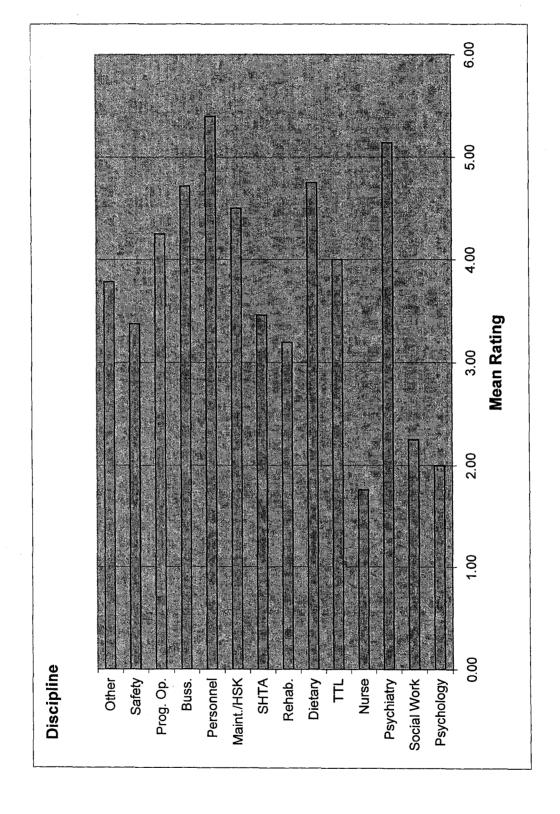
I will be working at KFPC five years from now.



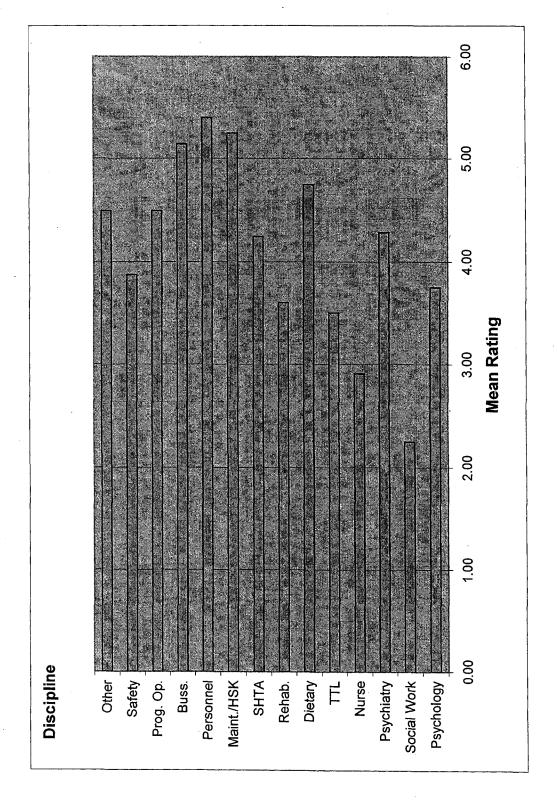
Hard work is appreciated and rewarded at KFPC.



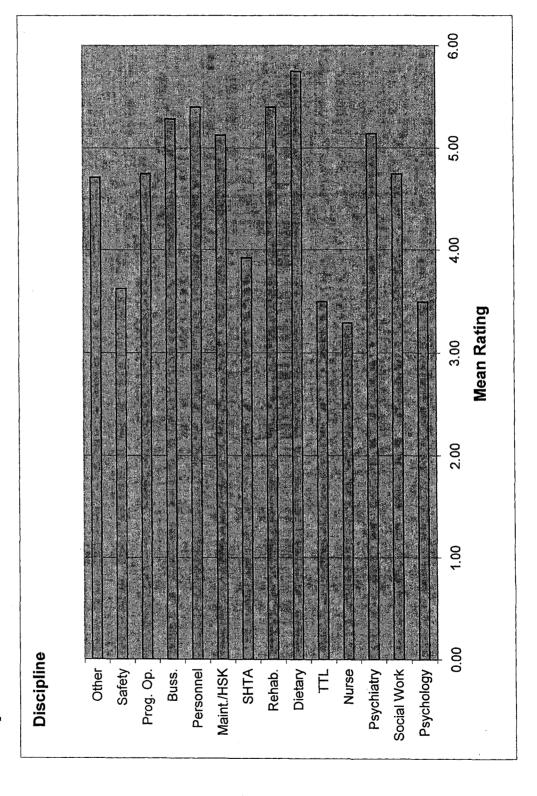
KFPC is a highly efficient, work-oriented place.



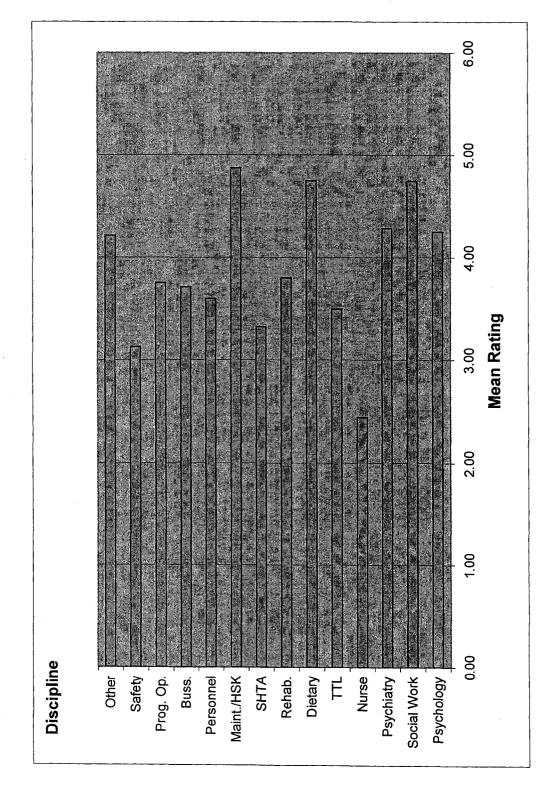
People put a lot of effort into what they do at KFPC.



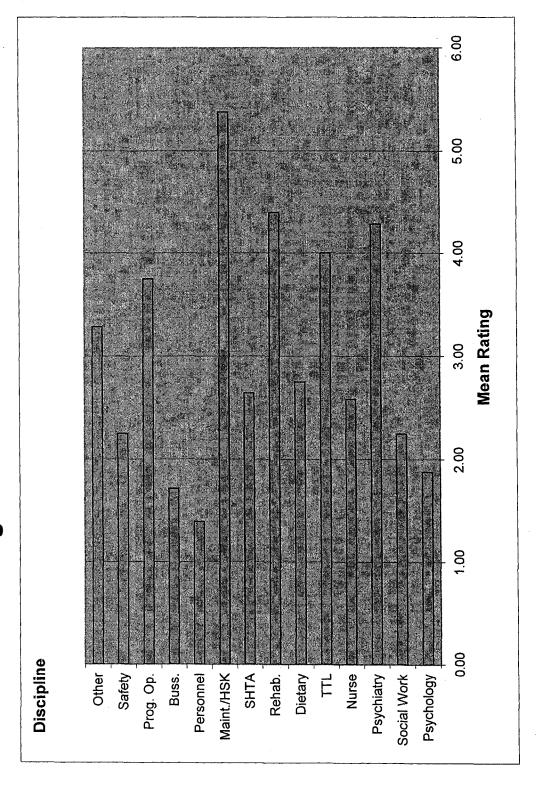
My job function and responsibilities have been clearly explained to me and I understand them.



Rules and regulations are well enforced.



Supervisors meet with employees regularly to discuss their future work goals.



# Appendix I

Related T-test Statistical Reports

NI -6	I1 202	12	13	14	15
N of cases	292	292	292	291	292
Minimum	1.000	1.000	1.000	1.000	1.000
Maximum	6.000	6.000	6.000	6.000	6.000
Median	5.000	4.000	4.000	4.000	4.000
Mean	4.791	3.894	3.462	3.570	3.976
Standard Dev	1.155	1.795	1.644	1.741	1.651
Variance	1.334	3.222	2.703	3.032	2.725
Skewness(G1)	-1.161	-0.493	-0.052	-0.221	-0.571
Kurtosis(G2)	1.128	-1.110	-1.148	-1.351	-0.854
<del> </del>	16	II1	II2	II3	114
N of cases	292	292	288	292	. 290
Minimum	1.000	1.000	1.000	1.000	1.000
Maximum	6.000	6.000	6.000	6.000	6.000
Median	5.000	5.000	4.000	5.000	4.000
Mean	4.548	4.517	4.000	4.322	3.545
Standard Dev	1.580	1.598	1.453	1.618	1.729
Variance	2.496	2.553	2.111	2.618	2.989
Skewness(G1)	-0.944	-0.981	-0.768	-0.753	-0.266
Kurtosis(G2)	-0.206	-0.140	-0.173	-0.610	-1.221
rui tosis(OZ)	-0.200	-0.140	-0.170	-0.010	-1.221
		II6	117	118	119
N of cases	292	289	282	290	292
Minimum	2.000	1.000	1.000	1.000	1.000
Maximum	6.000	6.000	6.000	6.000	6.000
Median	5.000	5.000	5.000	4.000	4.000
Mean	5.000 5.178	4.197	4.230	3.628	
		1.618			3.486
Standard Dev	0.752		1.623	1.668	1.655
Variance	0.566	2.617	2.634	2.781	2.739
Skewness(G1)	-0.891	-0.809	-0.785	-0.396	-0.255
Kurtosis(G2)	1.484	-0.414	-0.515	-1.153	-1.186
	1140	1144	1140		
Mafaaaa	II10	II11	II12	II13	II14
N of cases	287	292	288	292	276
Minimum	1.000	1.000	1.000	1.000	1.000
Maximum	6.000	6.000	6.000	6.000	6.000
Median	5.000	3.000	4.000	4.000	5.000
Mean Standard Day	4.192	2.928	4.340	3.699	4.562
Standard Dev	1.685	1.603	1.456	1.537	1.631
Variance	2.841	2.569	2.121	2.362	2.662
Skewness(G1)	-0.741	0.123	-0.832	-0.256	-1.052
Kurtosis(G2)	-0.637	-1.302	0.045	-0.949	-0.049
	II15	1146	II17	1140	U40
N of cases	1115 273	II16 292	1117 292	II18 290	II19
Minimum	1.000	1.000	1.000	1.000	292 1.000
Maximum	6.000	6.000	6.000		
Median	3.000	3.000		6.000	6.000
Mean			3.000	4.000	5.000
	3.275	3.092	3.360	4.083	4.349
Standard Dev Variance	1.737 3.016	1.811	1.600	1.417	1.589
	3.016	3.280	2.561	2.007	2.524
Skewness(G1) Kurtosis(G2)	0.033 -1.280	0.218 -1.419	-0.024 -1.067	-0.691 -0.294	-0.799 -0.375

	1120	1121
N of cases	289	292
Minimum	1.000	1.000
Maximum	6.000	6.000
Median	4.000	3.000
Mean	3.654	3.075
Standard Dev	1.626	1.699
Variance	2.644	2.888
Skewness(G1)	-0.268	0.101
Kurtosis(G2)	-1.106	-1.354

## The following results are for: QUIT = 0.000

	<b>I</b> 1	12	13	14	15
N of cases	252	252	252	251	252
Minimum	1.000	1.000	1.000	1.000	1.000
Maximum	6.000	6.000	6.000	6.000	6.000
Median	5.000	4.000	4.000	4.000	4.000
Mean	4.802	3.833	3.619	3.450	3.976
Standard Dev	1.171	1.846	1.657	1.714	1.641
Variance	1.371	3.406	2.747	2.937	2.693
Skewness(G1)	-1.169	-0.408	-0.219	-0.155	-0.567
Kurtosis(G2)	1.128	-1,249	-1.105	-1.376	-0.833

	16	II1	112	113	114
N of cases	252	252	249	252	250
Minimum	1.000	1.000	1.000	1.000	1.000
Maximum	6.000	6.000	6.000	6.000	6.000
Median	5.000	5.000	4.000	5.000	4.000
Mean	4.655	4.524	4.000	4.480	3.504
Standard Dev	1.575	1.625	1.470	1.583	1.770
Variance	2.482	2.641	2.161	2.506	3.135
Skewness(G1)	-1.123	-0.947	-0.752	-0.981	-0.215
Kurtosis(G2)	0.161	-0.241	-0.249	-0.129	-1.312

	115	116	ii7	118	119
N of cases	252	249	243	250	252
Minimum	2.000	1.000	1.000	1.000	1.000
Maximum	6.000	6.000	6.000	6.000	6.000
Median	5.000	5.000	5.000	4.000	4.000
Mean	5.151	4.297	4.128	3.616	3.544
Standard Dev	0.748	1.611	1.612	1.695	1.690
Variance	0.559	2.597	2.599	2.872	2.855
Skewness(G1)	-0.714	-0.918	-0.692	-0.381	-0.308
Kurtosis(G2)	0.773	-0.232	-0.628	-1.224	-1.232

	1110	II11	II12	II13	1114
N of cases	247	252	249	252	236
Minimum	1.000	1.000	1.000	1.000	1.000
Maximum	6.000	6.000	6.000	6.000	6.000
Median	5.000	3.000	5.000	4.000	5.000
Mean	4.219	2.909	4.406	3.587	4.805
Standard Dev	1.711	1.628	1.487	1.524	1.498
Variance	2.928	2.649	2.210	2.323	2.243
Skewness(G1)	-0.752	0.148	-0.840	-0.184	-1.457
Kurtosis(G2)	-0.659	-1.322	-0.060	-0.944	1,258

	1115	1116	ll17	II18	1119
N of cases	233	252	252	250	252
Minimum	1.000	1.000	1.000	1.000	1.000
Maximum	6.000	6.000	6.000	6.000	6.000
Median	4.000	3.000	4.000	4.000	5.000
Mean	3.524	3.202	3.409	4.056	4.294
Standard Dev	1.710	1.869	1.654	1.402	1.619
Variance	2.923	3.493	2.737	1.965	2.623
Skewness(G1)	-0.171	0.098	-0.064	-0.665	-0.740
Kurtosis(G2)	-1.177	-1.526	-1.175	-0.319	-0.518

	1120	1121
N of cases	249	252
Minimum	1.000	1.000
Maximum	6.000	6.000
Median	4.000	3.000
Mean	3.562	3.083
Standard Dev	1.601	1.744
Variance	2.562	3.041
Skewness(G1)	-0.206	0.103
Kurtosis(G2)	-1.103	-1.414

The following results are for: QUIT = 1.000

	· <b>I1</b>	12	13	14	15
N of cases	40	40	40	40	40
Minimum	2.000	1.000	1.000	1.000	1.000
Maximum	6.000	6.000	6.000	6.000	6.000
Median	5.000	4.500	2.000	5.000	4.000
Mean	4.725	4.275	2.475	4.325	3.975
Standard Dev	1.062	1.396	1.154	1.745	1.732
Variance	1.128	1.948	1.333	3.046	2.999
Skewness(G1)	-1.170	-1,176	0.853	-0.834	-0.614
Kurtosis(G2)	1.406	1.063	1.068	-0.625	-0.942

	16	111	· II2	113	114
N of cases	40	40	39	40	40
Minimum	1.000	1.000	1.000	1.000	1.000
Maximum	6.000	6.000	6.000	6.000	6.000
Median	4.000	5.000	4.000	3.000	4.000
Mean	3.875	4.475	4.000	3,325	3.800
Standard Dev	1.453	1.432	1.357	1.492	1,436
Variance	2.112	2.051	1.842	2.225	2.062
Skewness(G1)	-0.035	-1.353	-0.932	0.382	-0.615
Kurtosis(G2)	-0.743	0.983	0.653	-0.790	-0.144

	II5	116	117	II8	119
N of cases	40	40	39	40	40
Minimum	2.000	1.000	1.000	1.000	1.000
Maximum	6.000	6.000	6.000	6.000	6.000
Median	5.000	4.000	5.000	4.000	3.000
Mean	5.350	3.575	4.872	3.700	3.125
Standard Dev	0.770	1.534	1.559	1.506	1.381
Variance	0.592	2.353	2.430	2.267	1.907
Skewness(G1)	-2.130	-0.351	-1.709	-0.501	-0.051
Kurtosis(G2)	8.074	-0.640	1.945	-0.498	-0.396

File: Untitled

	II10	1111	II.12	II13	li14
N of cases	40	40	39	40	40
Minimum	1.000	1.000	1.000	1.000	1.000
Maximum	6.000	6.000	5.000	6.000	6.000
Median	4.500	3.000	4.000	5.000	3.000
Mean	4.025	3.050	3.923	4.400	3.125
Standard Dev	1.527	1.449	1.178	1.446	1.667
Variance	2.333	2,100	1.389	2.092	2.779
Skewness(G1)	~0.771	-0.038	-1.573	-0.860	0.526
Kurtosis(G2)	-0.317	-1.145	1.903	-0.164	-0.667

	II15	II16	1117	II18	1119
N of cases	40	40	40	40	40
Minimum	1.000	1.000	1.000	1.000	1.000
Maximum	4.000	6.000	6.000	6.000	6.000
Median	1.000	2.000	3.000	5.000	5.000
Mean	1.825	2.400	3.050	4.250	4.700
Standard Dev	1.059	1.194	1.176	1.515	1.344
Variance	1.122	1.426	1.382	2.295	1.805
Skewness(G1)	1.049	0.868	-0.101	-0.914	-1.219
Kurtosis(G2)	-0.177	0.876	0.237	0.071	1.272

	1120	II21
N of cases	40	40
Minimum	1.000	1.000
Maximum	6,000	6.000
Median	5.000	3.000
Mean	4.225	3.025
Standard Dev	1.687	1.405
Variance	2.846	1.974
Skewness(G1)	-0.812	0.012
Kurtosis(G2)	-0.567	-0.907

## IMPORT successfully completed.

## 292 cases and 34 variables processed and saved.

Latent Roots (Eigenvalu	les)				
	1	2 ·	3	4	5
·	12.950	2.273	1.645	1.158	1.098
	6	7	8	9	10
	1.074	1.001	0.835	0.657	0.543
	11	12	13	14	15
	0.492	0.439	0.394	0.378	0.338
	16	17	18	19	20
	0.264	0.241	0.210	0.197	0.150
	21	22	23	24	25
	0.145	0.137	0.119	0.097	0.073
	26	27			
	0.053	0.040			
Component loadings					
	1	2	3	4	5
II17	0.898	0.079	0.053	0.059	0.004
II10	0.860	0.199	0.214	0.005	-0.007
II16	0.838	0.121	-0.063	0.144	0.008
II11	0.804	-0.128	0.180	0.006	0.204
II9	0.794	0.155	-0.177	0.078	-0.095
II12	0.784	0.156	0.084	0.017	-0.049
I5 II8	0.772 0.771	0.191	0.260	0.092	-0.046
II7	0.771	-0.043 -0.369	0.041 -0.096	-0.116 -0.295	-0.200 0.194
II6	0.725	0.081	-0.114	-0.124	0.237
II13	0.709	-0.518	0.076	-0.158	0.082
II20	0.703	-0.421	0.124	-0.167	-0.017
I3	0.689	0.387	0.084	0.279	0.000
I4	0.687	-0.196	0.325	0.094	-0.083
II3	0.684	0.293	-0.258	0.269	0.042
II15	0.662	0.460	-0.095	-0.092	0.416
I6	0.660	0.262	-0.307	0.225	-0.241
II19 I2	0.639 0.635	-0.440	0.087 0.349	0.259	0.239
II4	0.635	-0.305 -0.312	0.349	0.278 0.124	0.072 0.078
II18	0.606	0.167	0.043	-0.603	-0.192
II21	0.577	-0.145	-0.105	0.185	-0.537
II2	0.566	-0.106	-0.567	-0.267	-0.089
I1	0.551	-0.132	-0.506	-0.011	-0.163
II14	0.521	0.580	-0.032	-0.190	0.292

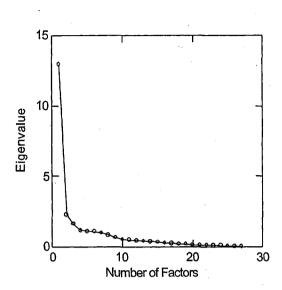
			File: Untitled		
II1 II5	0.487 0.480	0.233 -0.339	0.345 -0.489	-0.256 -0.027	-0.378 0.081
Variance Explaine	•				,
	1	2	3	4	5
		-	3	*	
	12.950	2.273	1.645	1.158	1.098
Percent of Total	Variance Explaine	ed			
	1	2 .	3	4	5
	47.961	8.420	6.093	4.288	4.067
Rotated Loading M	Matrix ( VARIMAX,	Gamma =	1.0000)		
	1	2	3	4	5
II15	0.876	0.158	0.187	0,117	0.005
II14	0.814	-0.024	0.084	0.243	-0.007
13	0.626	0.263	-0.035	0.124	0.480
II3	0.602	0.186	0.271	-0.040	0.471
II10	0.572	0.477	0.074	0.396	0.330
II6	0.561	0.368	0.363	0.177	0.060
II16	0.534	0.429	0.268	0.163	0.418
II17	0.526	0.521	0.237	0.282	0.367
II19	0.157	0.796	0.205	-0.123	0.132
12	0.147	0.782	-0.051	0.067	0.247
II13	0.054	0.758	0.411	0.249	0.000
II20	0.063	0.689	0.345	0.334	0.072
II11	0.427	0.683	0.177	0.210	0.111
14	0.168	0.661	0.020	0.294	0.283
II4	0.156	0.626	0.245	0.048	0.185
II7	0.234	0.612	0.554	0.255	~0.098
II2	0.210	0.092	0.790	0.171	0.161
II5	0.093	0.306	0.683	-0.112	0.104
I1	0.149	0.158	0.660	0.044	0.346
II18	0.310	0.179	0.202	0.821	-0.009
II1	0.196	0.145	-0.076	0.690	0.278
II21	-0.056	0.293	0.297	0.249	0.670
16	0.428	0.091	0.337	0.093	0.628
II9	0.488	0.296	0.359	0.204	0.452
I5	0.498	0.457	-0.020	0.342	0.370
II12 II8	0.489 0.270	0.396	0.163	0.325	0.347
		0.429	0.307	0.436	0.333
"Variance" Explai			•		
	1	2	3	4	5
	4.926	5.825	3.137	2.494	2.743
Percent of Total	Variance Explaine	ed			

11.618

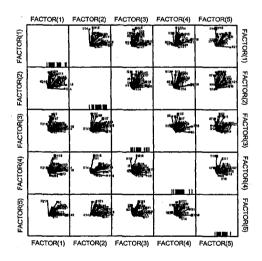
5

10.158

Scree Plot



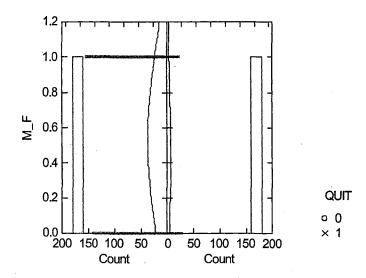
Factor Loadings Plot



Two-sample t test on M\_F grouped by QUIT

Group	N	<del> </del>	Mean	SD
0		236	0.521	0.501
1		40	0.450	0.504

Separate Variance t = 0.827 df = 52.9 Prob = 0.412Bonferroni Adjusted Prob = 1.000Difference in Means = 0.071 95.00% Cl = -0.101 to 0.244



Two-sample t test on I1 grouped by QUIT

Group		N		Меап	SD
	0 -		252	4.802	1.171
	1		40	4.725	1.062

Separate Variance t = 0.418 df = 55.2 Prob = 0.678

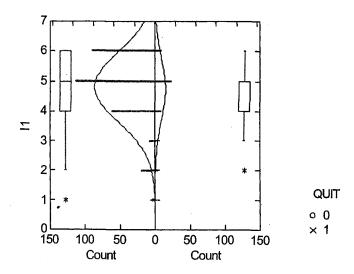
Bonferroni Adjusted Prob = 1.000

Difference in Means = 0.077 95.00% CI = -0.291 to 0.444

Pooled Variance t = 0.389 df = 290 Prob = 0.698

Bonferroni Adjusted Prob = 1.000

Difference in Means = 0.077 95.00% CI = -0.311 to 0.464



## Two-sample t test on I2 grouped by QUIT

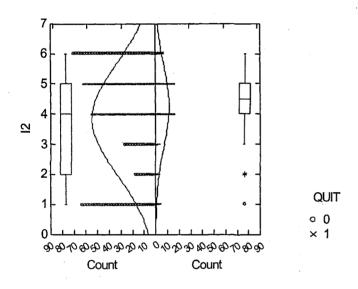
Group		N		Mean	SD
	0		252	3.833	1.846
	1		40	4.275	1.396

Separate Variance t = -1.771 df = 62.9 Prob = 0.081

Bonferroni Adjusted Prob = 1.000

Difference in Means = -0.442 95.00% CI = -0.940 to 0.057

Pooled Variance t = -1.448 df = 290 Prob = 0.149
Bonferroni Adjusted Prob = 1.000
Difference in Means = -0.442 95.00% CI = -1.042 to 0.159



#### Two-sample t test on I3 grouped by QUIT

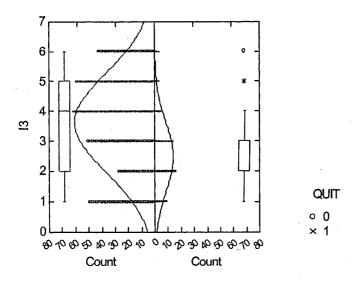
Group		N		Mean	SD
-	0		252	3.619	1.657
	1		40	2.475	1.154

Separate Variance t =  $5.441 \, df = 67.6 \, Prob = 0.000$ Bonferroni Adjusted Prob = 0.000Difference in Means =  $1.144 \, 95.00\% \, Cl = 0.724 \, to 1.564$ 

Pooled Variance t = 4.204 df = 290 Prob = 0.000

Bonferroni Adjusted Prob = 0.001

Difference in Means = 1.144 95.00% CI = 0.608 to 1.680



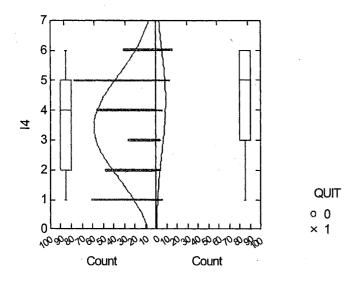
Two-sample t test on I4 grouped by QUIT

Group		N		Mean	SD
·	0		251	3.450	1.714
	. 1		40	4.325	1.745

Separate Variance t = -2.952 df = 51.7 Prob = 0.005

Bonferroni Adjusted Prob = 0.133

Difference in Means = -0.875 95.00% CI = -1.470 to -0.280

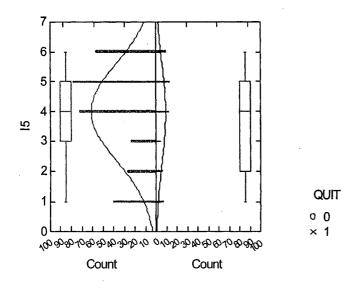


Two-sample t test on I5 grouped by QUIT

Group		N		Mean	SD
•	0		252	3.976	1.641
	1		40	3.975	1.732

Separate Variance t = 0.004 df = 50.7 Prob = 0.997Bonferroni Adjusted Prob = 1.000Difference in Means = 0.001 95.00% CI = -0.586 to 0.589

 $\begin{array}{cccc} Pooled\ Variance\ t=&0.004\ df=290 & Prob=&0.997\\ &Bonferroni\ Adjusted\ Prob=&1.000\\ Difference\ in\ Means=&0.001 & 95.00\%\ CI=&-0.553\ to&0.555 \end{array}$ 



Two-sample t test on I6 grouped by QUIT

Group		N		Mean	SD .
	0		252	4.655	1.575
	1		40	3.875	1.453

Separate Variance t = 3.115 df = 54.6 Prob = 0.003

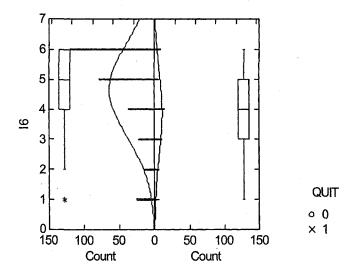
Bonferroni Adjusted Prob = 0.082

Difference in Means = 0.780 95.00% CI = 0.278 to 1.281

Pooled Variance t = 2.938 df = 290 Prob = 0.004

Bonferroni Adjusted Prob = 0.100

Difference in Means = 0.780 95.00% CI = 0.257 to 1.302



Two-sample t test on II1 grouped by QUIT

Group		N	······	Mean	SD
	0		252	4.524	1.625
	1		40	4.475	1.432

Separate Variance t = 0.196 df = 56.2 Prob = 0.845

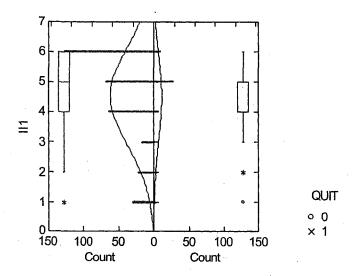
Bonferroni Adjusted Prob = 1.000

Difference in Means = 0.049 95.00% CI = -0.449 to 0.547

Pooled Variance t = 0.179 df = 290 Prob = 0.858

Bonferroni Adjusted Prob = 1.000

Difference in Means = 0.049 95.00% CI = -0.487 to 0.589



Two-sample t test on II2 grouped by QUIT

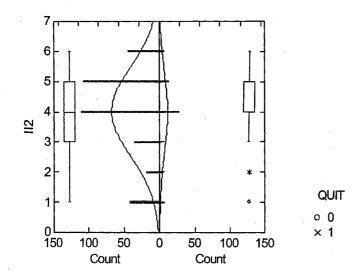
Group		N		Mean	SD
	0		249	4.000	1.470
	1		39	4.000	1.357

Separate Variance t = 0.000 df = 53.0 Prob = 1.000

Bonferroni Adjusted Prob = 1.000

Difference in Means = 0.000 95.00% CI = -0.474 to 0.474

Pooled Variance t = 0.000 df = 286 Prob = 1.000Bonferroni Adjusted Prob = 1.000Difference in Means = 0.000 95.00% Cl = -0.493 to 0.493



## Two-sample t test on II3 grouped by QUIT

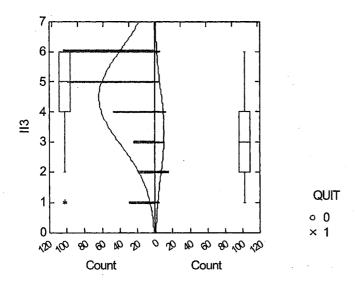
Group		N		Mean	SD
	0		252	4.480	1.583
	1		40	3.325	1.492

Separate Variance t = 4.511 df = 53.9 Prob = 0.000

Bonferroni Adjusted Prob = 0.001

Difference in Means = 1.155 95.00% CI = 0.642 to 1.669

Pooled Variance t = 4.320 df = 290 Prob = 0.000 Bonferroni Adjusted Prob = 0.001 Difference in Means = 1.155 95.00% CI = 0.629 to 1.681



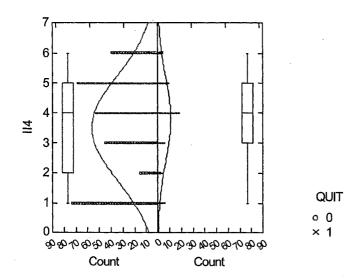
Two-sample t test on II4 grouped by QUIT

Group		N		Mean	SD
	0		250	3.504	1.7 <b>7</b> 0
	1		40	3.800	1.436

Separate Variance t = -1.169 df = 59.7 Prob = 0.247

Bonferroni Adjusted Prob = 1.000

Difference in Means = -0.296 95.00% CI = -0.802 to 0.210



Two-sample t test on II5 grouped by QUIT

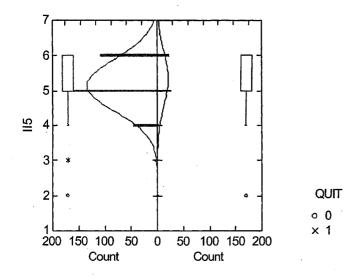
Group		N		Mean	SD	
•	0		252	5.151	0.748	
	1		40	5.350	0.770	

Separate Variance t = -1.527 df = 51.4 Prob = 0.133

Bonferroni Adjusted Prob = 1.000

Difference in Means = -0.199 95.00% CI = -0.461 to 0.063

Pooled Variance t = -1.559 df = 290 Prob = 0.120
Bonferroni Adjusted Prob = 1.000
Difference in Means = -0.199 95.00% CI = -0.451 to 0.052



#### Two-sample t test on II6 grouped by QUIT

Group		N		Mean	SD
	0		249	4.297	1.611
	1		40	3.575	1.534

 Separate Variance t =
 2.744 df =
 53.8 Prob =
 0.008

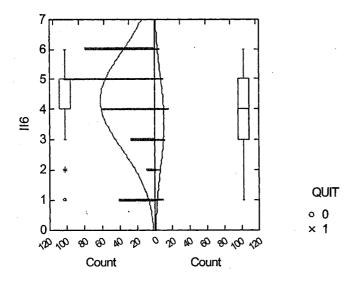
 Bonferroni Adjusted Prob =
 0.230

 Difference in Means =
 0.722 95.00% CI =
 0.195 to
 1.250

Pooled Variance t = 2.648 df = 287 Prob = 0.009

Bonferroni Adjusted Prob = 0.239

Difference in Means = 0.722 95.00% CI = 0.185 to 1.259



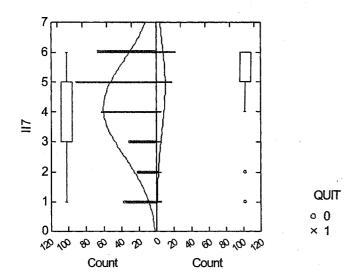
Two-sample t test on II7 grouped by QUIT

Group		N		Mean	SD
•	0		243	4.128	1.612
	1		39	4.872	1.559

Separate Variance t = -2.754 df = 51.9 Prob = 0.008

Bonferroni Adjusted Prob = 0.227

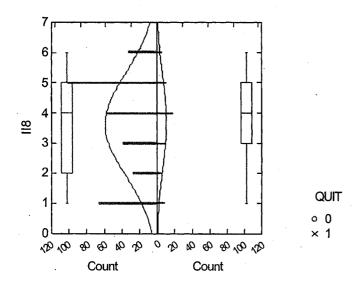
Difference in Means = -0.744 95.00% CI = -1.286 to -0.202



Two-sample t test on II8 grouped by QUIT

Group		N	.	Mean	SD
	0		250	3.616	1.695
	1		40	3.700	1.506

 $\begin{array}{cccc} \mbox{Pooled Variance } t = & -0.295 \mbox{ df} = & 288 & \mbox{Prob} = & 0.768 \\ \mbox{Bonferroni Adjusted Prob} = & 1.000 \\ \mbox{Difference in Means} = & -0.084 & 95.00\% \mbox{ CI} = & -0.644 \mbox{ to} & 0.476 \\ \end{array}$ 



Two-sample t test on II9 grouped by QUIT

Group		N		Mean	SD
	0		252	3.544	1.690
	1		40	3.125	1.381

Separate Variance t = 1.723 df = 59.2 Prob = 0.090

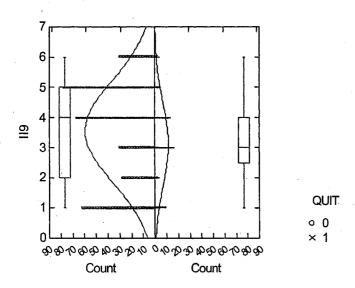
Bonferroni Adjusted Prob = 1.000

Difference in Means = 0.419 95.00% CI = -0.067 to 0.905

Pooled Variance t = 1.489 df = 290 Prob = 0.137

Bonferroni Adjusted Prob = 1.000

Difference in Means = 0.419 95.00% CI = -0.135 to 0.972



Two-sample t test on II10 grouped by QUIT

Group		N		Mean	SD
	0		247	4.219	1.711
	· 1		40	4.025	1.527

Separate Variance t = 0.731 df = 56.1 Prob = 0.468

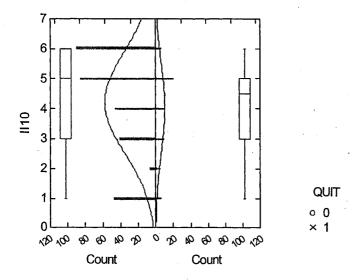
Bonferroni Adjusted Prob = 1.000

Difference in Means = 0.194 95.00% CI = -0.337 to 0.724

Pooled Variance t = 0.673 df = 285 Prob = 0.501

Bonferroni Adjusted Prob = 1.000

Difference in Means = 0.194 95.00% CI = -0.372 to 0.760



Two-sample t test on II11 grouped by QUIT

Group		N		Mean	SD
	0		252	2.909	1.628
	1 .		40	3.050	1.449

Separate Variance t = -0.563 df = 55.8 Prob = 0.576

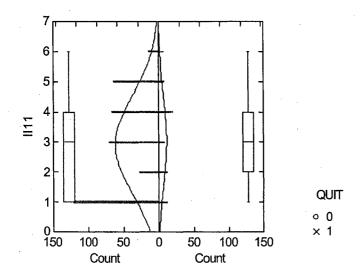
Bonferroni Adjusted Prob = 1.000

Difference in Means = -0.141 95.00% CI = -0.644 to 0.362

Pooled Variance t = -0.517 df = 290 Prob = 0.605

Bonferroni Adjusted Prob = 1.000

Difference in Means = -0.141 95.00% CI = -0.679 to 0.396



Two-sample t test on II12 grouped by QUIT

Group	·	N		Mean	SD
	0		249	4.406	1.487
	1		39	3.923	1.178

Separate Variance t = 2.288 df = 58.7 Prob = 0.026

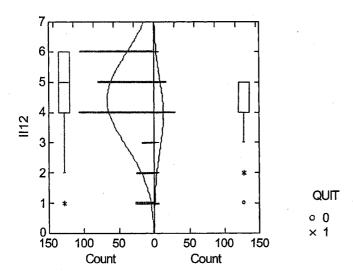
Bonferroni Adjusted Prob = 0.721

Difference in Means = 0.483 95.00% CI = 0.060 to 0.905

Pooled Variance t = 1.933 df = 286 Prob = 0.054

Bonferroni Adjusted Prob = 1.000

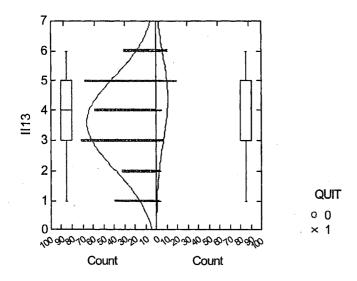
Difference in Means = 0.483 95.00% CI = -0.009 to 0.974



Two-sample t test on II13 grouped by QUIT

Group		N		Mean	SD
·	0		252	3.587	1.524
	1		40	4.400	1.446

Separate Variance t = -3.276 df = 53.7 Prob = 0.002 Bonferroni Adjusted Prob = 0.052 Difference in Means = -0.813 95.00% CI = -1.310 to -0.315



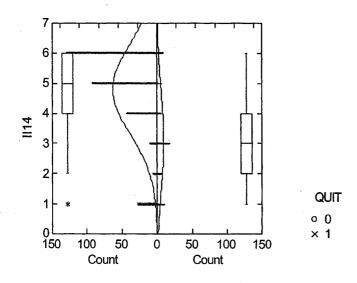
Two-sample t test on II14 grouped by QUIT

Group	····	N		Mean	SD
	0		236	4.805	1.498
	1		40	3.125	1.667

Separate Variance t = 5.978 df = 50.2 Prob = Bonferroni Adjusted Prob = 0.000 Difference in Means = 1.680 95.00% CI = 1.116 to 2.244

Pooled Variance t = 6.452 df = 274 Prob = Bonferroni Adjusted Prob = 0.000

Difference in Means = 1.680 95.00% CI = 1.167 to 2.193



Two-sample t test on II15 grouped by QUIT

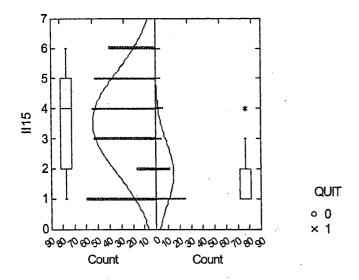
Group		N		Mean	SD
	0		233	3.524	1.710
	1		40	1.825	1.059

Separate Variance t = 8.429 df = 79.0 Prob = Bonferroni Adjusted Prob = 0.000

Difference in Means = 1.699 95.00% CI = 1.298 to 2.100

Pooled Variance t = 6.081 df = 271 Prob = Bonferroni Adjusted Prob = 0.000

Difference in Means = 1.699 95.00% CI = 1.149 to



Two-sample t test on II16 grouped by QUIT

Group		N ·		Mean	SD
	0		252	3.202	1.869
	11		40_	2.400	1.194

Separate Variance t = 3.606 df = 73.5 Prob = 0.001

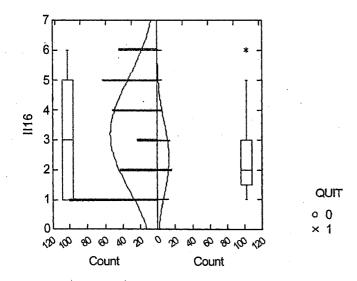
Bonferroni Adjusted Prob = 0.016

Difference in Means = 0.802 95.00% CI = 0.359 to 1.246

Pooled Variance t = 2.629 df = 290 Prob = 0.009

Bonferroni Adjusted Prob = 0.252

Difference in Means = 0.802 95.00% CI = 0.202 to 1.403



Two-sample t test on II17 grouped by QUIT

Group		N		Mean	SD
·	0		252	3.409	1.654
	1		40	3.050	1.176

Separate Variance t = 1.683 df = 66.4 Prob = 0.097

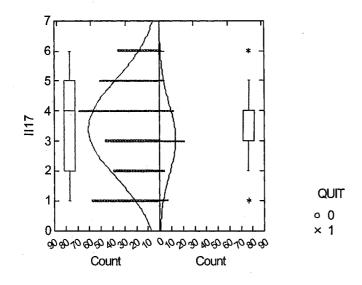
Bonferroni Adjusted Prob = 1.000

Difference in Means = 0.359 95.00% Cl = -0.067 to 0.784

Pooled Variance t = 1.319 df = 290 Prob = 0.188

Bonferroni Adjusted Prob = 1.000

Difference in Means = 0.359 95.00% CI = -0.177 to 0.894



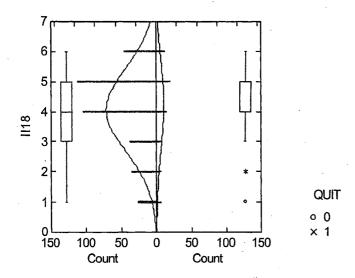
Two-sample t test on II18 grouped by QUIT

Group		N		Mean	SD
	0		250	4.056	1.402
	1		40	4.250	1.515

Separate Variance t = -0.760 df = 50.3 Prob = 0.451

Bonferroni Adjusted Prob = 1.000

Difference in Means = -0.194 95.00% CI = -0.707 to 0.319



Two-sample t test on II19 grouped by QUIT

Group		N		Mean	SD
	0		252	4.294	1.619
	1		40	4.700	1.344

Separate Variance t = -1.724 df = 58.6 Prob = 0.090

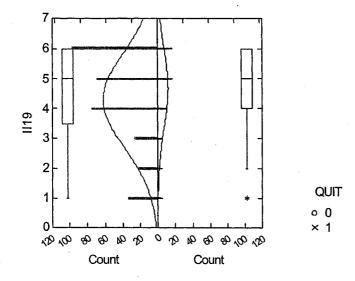
Bonferroni Adjusted Prob = 1.000

Difference in Means = -0.406 95.00% CI = -0.878 to 0.065

Pooled Variance t = -1.506 df = 290 Prob = 0.133

Bonferroni Adjusted Prob = 1.000

Difference in Means = -0.406 95.00% CI = -0.937 to 0.125



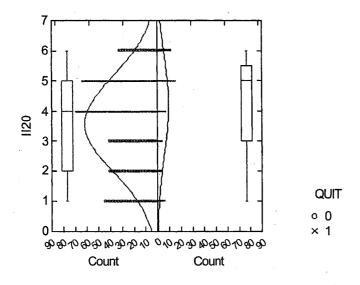
Two-sample t test on II20 grouped by QUIT

Group		N		Mean	SD	_
•	. 0		249	3.562	1.601	
	1		40	4.225	1.687	

Separate Variance t = -2.323 df = 50.9 Prob = 0.024

Bonferroni Adjusted Prob = 0.679

Difference in Means = -0.663 95.00% CI = -1.236 to -0.090



# Two-sample t test on II21 grouped by QUIT

Group		N		Mean	SD
	.0		252	3.083	1.744
	1		40	3.025	1.405

Separate Variance t = 0.235 df = 59.9 Prob = 0.815

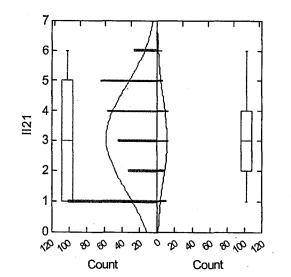
Bonferroni Adjusted Prob = 1.000

Difference in Means = 0.058 95.00% CI = -0.437 to 0.554

Pooled Variance t = 0.201 df = 290 Prob = 0.841

Bonferroni Adjusted Prob = 1.000

Difference in Means = 0.058 95.00% CI = -0.512 to 0.629



QUIT 0 0 × 1