

**NAVAL POSTGRADUATE SCHOOL
Monterey, California**



THESIS

**RECOMMENDATIONS FOR ENHANCING THE
MOTIVATION OF PETTY OFFICERS IN THE TURKISH
AND THE UNITED STATES NAVIES**

by

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June 1999

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The missions and roles of the Turkish Navy have changed because of changing world conditions over the last fifteen years. The frequency and length of deployments and missions have increased, while pay level has decreased. The new frigates with complex technology introduced into the fleet recently have required a more knowledgeable and skillful work force, including petty officers. As petty officers have become more competent and knowledgeable, their needs for recognition, choice, and meaningfulness, as well as their needs for rewards and benefits, also have increased. As a result of all these changes, Turkish petty officers seemed to have become less motivated. The U.S. Navy has faced similar difficulties over the last twenty years. A 1993 military personnel research study in the U.S. revealed that keeping capable and energetic personnel in the service is going to become even more difficult in the future, as petty officers expect their work and quality of life to improve and as civilian employment alternatives become more appealing [Ref. 2]. This thesis examines the factors, extrinsic and intrinsic, that motivate and demotivate petty officers in the Turkish and U.S. Navies. The study utilizes a survey questionnaire to determine common areas of concern and recommends, accordingly, ways to increase or maintain the motivation of petty officers in the Turkish and U.S. Navies.

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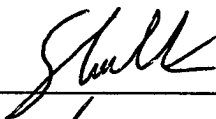
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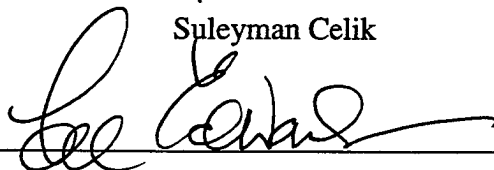
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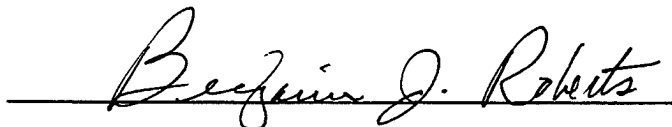


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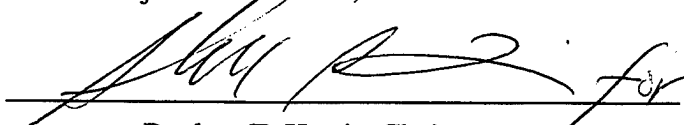
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ABSTRACT

The missions and roles of the Turkish Navy have changed because of changing world conditions over the last fifteen years. The frequency and length of deployments and missions have increased, while pay level has decreased. The new frigates with complex technology introduced into the fleet recently have required a more knowledgeable and skillful work force, including petty officers. As petty officers have become more competent and knowledgeable, their needs for recognition, choice, and meaningfulness, as well as their needs for rewards and benefits, also have increased. As a result of all these changes, Turkish petty officers seemed to have become less motivated. The U.S. Navy has faced similar difficulties over the last twenty years. A 1993 military personnel research study in the U.S. revealed that keeping capable and energetic personnel in the service is going to become even more difficult in the future, as petty officers expect their work and quality of life to improve and as civilian employment alternatives become more appealing [Ref. 2]. This thesis examines the factors, extrinsic and intrinsic, that motivate and demotivate petty officers in the Turkish and U.S. Navies. The study utilizes a survey questionnaire to determine common areas of concern and recommends, accordingly, ways to increase or maintain the motivation of petty officers in the Turkish and U.S. Navies.

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I. INTRODUCTION

A. PURPOSE

There have been significant changes and improvements in the Turkish Navy within the last 15 years. The Turkish Navy retired its old ships and introduced new frigates with complex technology into the fleet. Because this high technology required a more knowledgeable and skillful workforce, petty officers, who previously had occupied mainly technician-level jobs, had to be trained to meet new needs. During this time, the missions and roles of the Turkish Navy changed because of the changing world conditions. The frequency and length of deployments and missions increased, resulting in high family separation time. Despite the bigger demands placed on petty officers, pay levels in the Turkish Navy decreased significantly due to economic conditions in the country. As a result of all these changes, Turkish petty officers seemed to become less motivated. Although most of these conditions had an effect on Turkish Officers, too, petty officers seem to be more affected for the following reasons:

1. Lack of promotion opportunities for petty officers in the Turkish Navy.
2. Increased job demand along with the developing technology.
3. Lower pay level than their civilian colleagues.
4. Unequally distributed workload among petty officers in different branches.
5. Longer sea duty cycle for petty officers compared to officers on Turkish Navy frigates.

The Turkish Navy is currently in the process of establishing Total Quality Management (TQM) principles wherever possible, to better utilize its limited resources.

The essence of any Navy is its human resources. One effective use of human resources is the utilization of petty officers on Turkish Navy ships to reach an effective TQM level, and to increase the overall operational ability of ships. For this mission to be accomplished, petty officers must be motivated. The Turkish Navy emphasizes "motivation" as a means to reach its goal and considers the following issues important for motivation:

1. Identifying the reasons for leaving the Navy and suggesting changes that might encourage them to stay in the service.
2. Emphasizing the concept of discipline since discipline is considered an essential factor in the Turkish Navy.
3. Dealing with personnel who have psychological problems.
4. Increasing motivation by awarding badges and medals that recognize various skills and competencies.
5. Establishing an incentive system to obtain a balanced, clear, and effective evaluation.
6. Emphasizing teamwork in every unit.
7. Improving social services: health, welfare, housing, and medical.
8. Suggesting improvements in personnel finances to the Turkish General Staff based on economic conditions in the country. [Ref. 1]

While all of these factors are important, the list is not complete. In particular, the "internal" motivation a person gets directly from the work itself, such as meaningfulness and competence, seems to be lacking among petty officers. As petty officers become

more competent and knowledgeable, their needs for recognition, choice, meaningfulness, etc. also increase. Since the Turkish Navy can not fully satisfy its personnel with an adequate pay level—due to the limited resources of the country—it must find other ways to motivate petty officers.

The U.S. Navy has faced similar problems for the last twenty years. A 1993 military personnel research study revealed that keeping capable and energetic personnel in the service is going to become even more difficult in the future, as petty officers expect their work and quality life to improve and as civilian employment alternatives become more appealing. [Ref. 2]

This study will examine the factors that motivate and demotivate petty officers in the Turkish and U.S. Navies in order to determine common areas of concern and make recommendations accordingly. The study will provide a broader perspective on the issue of motivation in both Navies by attempting to identify both internal and external motivators and demotivators. Among the motivators are pay, recognition, promotion, respect, sense of accomplishment, meaningful work, rewards, autonomy, teamwork, and good communication within the ship; the demotivators include disrespectful treatment, stress, pressure, low pay, frequency of deployments, inadequate career opportunities, and unevenly distributed workload. Knowing these significant factors, superiors can utilize Turkish and the U.S. petty officers better either by increasing their motivation or by keeping their motivation level high. The study will also identify factors common to both Navies. While there may be similarities, the different cultures may determine different attitudes in the Turkish and U.S. Navies. This study will be exploratory and may provide guidance for further research in specific areas to find out what the two Navies are doing

to motivate their petty officers. The outcome of the study will be recommendations for enhancing the motivation and commitment of petty officers in the Turkish and U.S. Navies based on the evaluation of the sample survey results.

B. DISCUSSION

Motivation of personnel is one aspect of human resources management. Many managers often seem to lack an understanding or appreciation of human behavior and motivation. All people have personal needs and, thus, seek opportunities to fulfill their ambitions and aspirations, to utilize their talents and abilities, and to perform work in accordance with their occupational interests. In the past, money and fringe benefits were considered prime motivators, while the human factors were not sufficiently considered. Today, worker attitudes have changed, and human factors are considered very important for productivity and the quality of work [Ref. 3]. Money and fringe benefits are still major components to motivation, but can be enhanced by human factors such as job satisfaction, self-esteem, sense of accomplishment and other factors inherent to the work itself. In his article, Bob Nelson [Ref. 4:p. 1] described the incongruities between today's practices and what may really work as follows:

1. Most managers think money is the top motivator, but it may not be.
2. What motivates others is sometimes different from what motivates oneself.
3. While there is a place for formal awards, the greatest impact in using such awards comes from their symbolic value.
4. Recognition of good performance will enhance the quality of work of the employees.

Nelson's argument emphasizes the importance of intrinsic motivation and ignores the external motivators. Nevertheless, it is true that intrinsic motivation is becoming a more and more popular area of study for social scientists. Today's successful managers and supervisors have the ability to develop a self-motivating environment to achieve personnel and organizational goals and maximize the capabilities of their work force [Ref. 3].

While numerous motivation and productivity studies have been conducted in industrial organizations, few have studied specific military organizations or groups of military personnel, especially Navy petty officers. The Navy environment differs significantly from other military and, especially, industrial organizations with its specific mission, goals, values, and its own particular culture. Thus, the question of how to motivate petty officers in the Navy to meet high standards is not easy to answer. In fact, it is not always clear what an individual's most important needs are and how well they have been or could have been satisfied. This is complicated by the fact that petty officers are a diverse group of individuals with varying age, rank, experience, technical skills, training, and so on. This diversity can challenge management because what motivates one individual may not motivate another; the motivational factors of large groups of petty officers may also vary from one to the next. Successful management depends greatly on the managers' capabilities. Certainly, managers who apply the principles of motivation theory to their management style may see improved productivity, work quality, and work satisfaction among their petty officers.

C. RESEARCH QUESTIONS

The primary research question for this study is:

How can the Turkish Navy and the U.S. Navy enhance the motivation and commitment of their petty officers, taking into account the cultural differences between the two Navies?

The subsidiary research questions are:

1. What significant motivational factors affect job performance in the Turkish and U.S. Navies, and what are their degrees of importance for petty officers?
2. What are the similarities and differences between the motivational factors of each country's petty officers?

D. SCOPE AND LIMITATIONS

This research is a descriptive study of motivational factors among petty officers in the U.S. and Turkish Navies. The scope of this research involves the motivational evaluation of petty officers in the Turkish and U.S. Fleet frigates or equivalents. The study also includes a detailed literature review of motivation theories developed over the past sixty years (1939-1999). A survey questionnaire has been developed to obtain information on the factors, extrinsic and intrinsic, that may influence the performance of petty officers in the Turkish and U.S. Navies.

The subjects participating in this study are limited to Lieutenant Junior Grades, Lieutenants, and Lieutenant Commanders in the U.S. Navy, and Lieutenant Junior Grades in the Turkish Navy. The respondents are assumed to rate the survey questions at face

value from a petty officer's point of view. In answering the questions, junior Navy officers will indicate what they believe to be the motivators and demotivators among U.S. and Turkish petty officers. The sample survey results will be used to identify the major sources of motivation and demotivation among petty officers on Turkish and U.S. Navy ships.

This study examines the motivation issue in a general sense and does not include trends that may vary among petty officers, such as ranks, pay levels, duty stations and branches.

E. ORGANIZATION OF THE THESIS

Following this introductory chapter, the study is organized into five chapters. Chapter II will provide a review of the literature on motivation theories developed over the past sixty years. Chapter III will discuss the methodology used for this study. Chapter IV will present the survey results and the analysis of these results. Finally, Chapter V will summarize the study, present conclusions and recommendations, and provide recommendations for further study.

II. LITERATURE REVIEW

This chapter begins with the definition of “motivation” and the process of motivating. Then some of the most important theories of motivation are discussed. A summary and conclusions part is presented to improve the understanding of motivation theories comparing them to each others.

A. INTRODUCTION TO MOTIVATION

Human motivation has been regarded as important since ancient times. Yet there is no universally agreed-upon definition of motivation. Simply, motivation is what makes the difference between doing as little as you can get away with and doing everything that you possibly can [Ref. 5:p. 3]. Some other comprehensive definitions of motivation are provided below:

- Motivation is the psychological process that cause the arousal, direction, and persistence of voluntary actions that are goal directed [Ref. 6:p. 28].
- Motivation is the art of helping people to focus their minds and energies on doing their work as effectively as possible [Ref. 5:p. 3].
- Motivation is the state of mind, desire, energy, or interest that translates into action [Ref. 7:p. 190].

As far as motivating people on the job is concerned, the basic problem appears the one of discovering how to channel a person’s energy in the direction of useful work [Ref. 8:p. 29]. In the early twentieth century, the concept of “economic man” was the basic assumption, which means the worker would always act in his own best interest and work

primarily to satisfy economic needs. Money and fringe benefits were prime factors to motivate the employee. Later on an alternative (or complementary) view of worker, “social man,” has been developed. This view, without ignoring the importance of economic needs, simply meant that the worker was a social being and economic rewards and punishments had to be understood in their social context [Ref. 9:p. 13]. Extrinsic motivators, such as money, may not always motivate the employee by itself. So intrinsic motivators along with the extrinsic ones should be used together to motivate the employee. Intrinsic motivation involves psychological rewards that individuals derive directly from a task.

Motivation process is composed of three important components: (1) individual differences, (2) actual job, and (3) organization. “Heredity” and “environment” are two determinants of *individual difference* characteristics. Heredity consists of an individual’s gene pool, gender, race, and ethnic background. Environment is consists of cultural factors, educational system, and parental influence. Individual characteristics affect the motivation in such a way that one person may have more motivation than the other may, all conditions are being equal. The second component of motivation is the *actual job* that people do. If the job offers workers interesting tasks, challenging work, a sense of accomplishment, and opportunity to use and develop skills, they are more likely to be motivated. The third component of motivation is the *organization*. The organization must provide the right climate and opportunities to motivate employees. The organizational component includes corporate culture, structure, strategies, mission, norms, policies and practices. A highly supportive culture can motivate the employee

while a hostile culture may create dissatisfaction even if other needs are satisfied fairly.

[Ref. 7:pp. 190-198]

On the subject of motivation, behavioral scientists and organization development researchers have developed an enormous amount of theory. The reason behind this fact is that there is no magic formula to motivate people and none of the motivational theories by itself explains the motivation. Each individual has unique characteristics and all of the major motivational theories help to demonstrate different parts of this uniqueness. Among these theories, several important ones will be discussed in this chapter. These are Maslow's Needs Hierarchy Theory, Herzberg's Motivation-Hygiene Theory, Theory X and Y, Achievement Motivation Theory, Equity Theory, Expectancy Theory, Job Characteristics Theory, and Goal Setting Theory.

B. THEORIES OF MOTIVATION

1. Maslow's Needs Hierarchy Theory

The most well known and widely used theory of motivation is Abraham Maslow's "Hierarchy of Needs." Maslow proposed that all individuals have basic sets of needs that they strive to fulfill over the course of their lives. He identified five basic "needs," and ranked them into a conceptual hierarchy. Underlying this hierarchy are four assumptions:

1. A satisfied need does not motivate. When a need is satisfied, another need emerges to take its place, so people are always striving to satisfy some need.
2. The grouping of needs for people is very complex, with a separate number of needs affecting the behavior of each person at any one time.

3. Lower level needs must be satisfied before higher level needs can be fully dealt with to drive behavior.

4. There are more ways to satisfy higher level needs than lower level needs.

[Ref. 10:p. 30]

Maslow presents these five basic needs as physiological needs, safety and security needs, social needs, esteem needs, and the need for self-actualization. Figure 2.1 shows the five need categories arranged in Maslow's hierarchy. The needs are as follows:

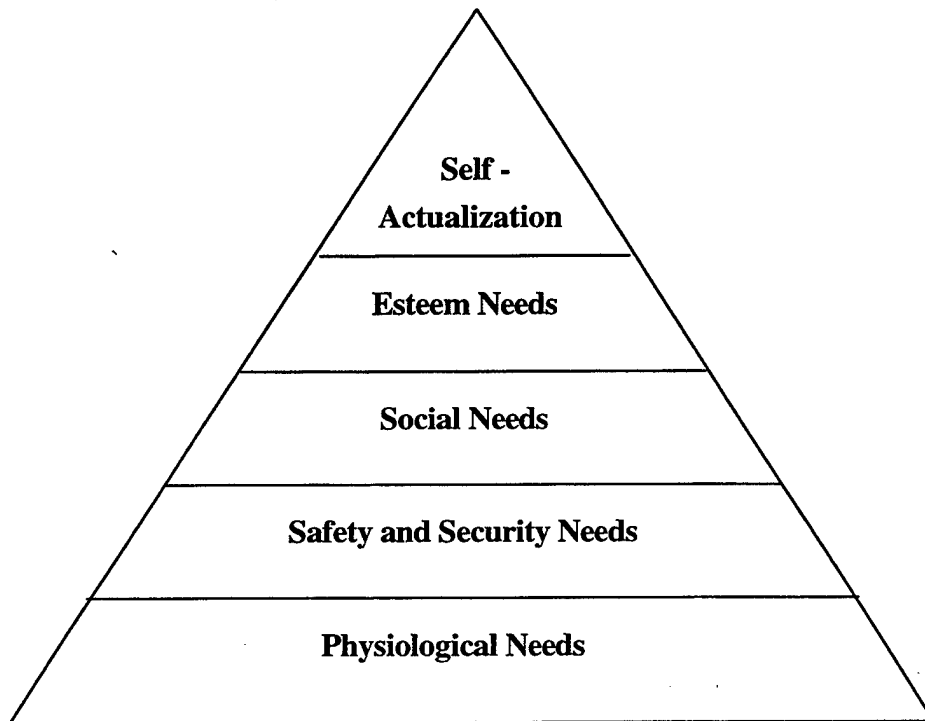


Figure 2.1. Maslow's Hierarchy of Needs

1. Physiological needs: The needs that are usually taken as the starting point for motivation theory are the so-called physiological drives and occupies the lowest level in the hierarchy of needs [Ref. 11:p. 35]. Undoubtedly these physiological needs are the most important of all needs. These include needs for food, water, rest, shelter, and clothing. Managers who focus on these needs try to motivate employees by offering wage increases, better working conditions, more leisure time, and better fringe benefits [Ref. 10:p. 32].
2. Safety and security needs: When physiological needs are reasonably satisfied, the next level needs, which are safety and security, begin to dominate an individual's behavior. Safety and security needs are concerned with ones future well being. These include physical and emotional security and safety, job security, health care, money, and insurance [Ref. 12, and Ref. 10:p. 32].
3. Social needs: If both the physiological and the security needs are fairly well gratified, the social needs that are the need for acceptance, affection, friendship, love, and feeling of belonging will emerge. Managers address these needs by being supportive, emphasizing employee acceptance by co-workers, extracurricular activities and following group norms [Ref. 10:p. 32].
4. Esteem needs: These needs are based on the belief that a person has a basic need for self-respect (feeling of personnel worth, adequacy, and competence); and the need of the esteem of others (respect, admiration, recognition, and status from others) [Ref. 12]. Social and esteem needs are closely interrelated, since how people feel about themselves influences how others feel about them; conversely, how they relate to others greatly influences how people feel

about themselves [Ref. 13:p. 13]. Satisfaction of self-esteem need leads to feeling of self-confidence, worth, strength, capability, and adequacy but thwarting of these needs produces feelings of inferiority, of weakness, and of helplessness [Ref. 11:p. 45]. Managers who focus on esteem needs tend to emphasize public awards and recognition [Ref. 10:p. 32].

5. Self-actualization needs: The highest level of needs is for fulfillment, self-realization, and self-actualization. This is the need that one has to accomplish his or her full potential. A person who achieves this level is basically a satisfied person and Maslow states “we can expect the fullest (and healthiest) creativeness” from this person. Managers who emphasize self-actualization may involve employees in designing jobs, make special assignments that capitalize on employees’ unique skills, or allow work crews to develop work procedures and plans for implementation. [Ref. 10:p. 33]

Although presented as a hierarchical order, a person can move within the hierarchy as situations change. A need does not have to be fully satisfied before it is no longer a motivator. Maslow states that most people are partially satisfied and partially unsatisfied in all their basic needs at the same time [Ref. 14]. Maslow’s theory basically tells that individuals have needs and therefore they have natural objectives that they want to achieve. So managers should focus on providing these needs sufficiently.

2. Herzberg’s Motivation-Hygiene Theory

Herzberg reported that satisfaction and dissatisfaction were not caused by different degrees or levels of the same factors, but completely different factors. He

categorized the factors related to good feelings about one's job as "motivators" or "satisfiers," and the factors related to bad feelings associated with the physical characteristics of the work environment as "hygiene" factors or "dissatisfiers." The first factor, motivator needs, is higher-order or growth needs and satisfies Maslow's higher level needs. These needs include achievement, recognition, the work itself, responsibility, advancement, and growth. Herzberg called the job satisfiers "motivators" because they were effective in motivating workers. Motivator needs are satisfied by things such as responsible challenging work, independence of action, recognition, achievement, trust, and respect for the individual. The second set of factors, hygiene needs, satisfies Maslow's lower level needs. Hygiene needs cause dissatisfaction when absent, but do not motivate when present. These needs include such things as pay, security, coworkers, working conditions, supervision, interpersonal relations, and company policy and administration. Job dissatisfiers are relatively fixed by the company and beyond the control of workers. The factors associated with motivators and hygiene factors are summarized in Table 2.1. [Ref. 10:p. 39]

Industry tends to stress "hygiene" factors in its attempt to motivate workers while ignoring the "motivator" factors. "Herzberg insists that hygiene factors are important and they must be adequately provided if a person is to rise above them to the self-actualizing concerns of involving himself in meaningful tasks." [Ref. 15] But once the hygiene factors are adequately provided they should not be used anymore for motivation purposes. Because these lower level needs, such as pay and fringe benefits, are quickly satisfied and lose their power to motivate the employee. So the manager will have to escalate the offer to further motivate the employee and there is no end to this cycle.

Hygiene factors (External, extrinsic dissatisfiers)	Motivators (Internal, intrinsic satisfiers)
Company policy and administration	Achievement
Methods of supervision	Recognition of achievement
Interpersonal relations with peers, superiors, and subordinates	Responsibility
Working conditions	Advancement
Compensation	Interesting work
Job security	Personal growth
Symbols of status	
Personal problems	

Table 2.1 The Factors In Herzberg's Theory [Ref. 13:p. 40]

Herzberg's further research on the subject of self-actualizing workers resulted in two additional principles: job enrichment and job enlargement. According to Herzberg:

Job enrichment means actually increasing the challenging content of the job that will cause the employee to grow both in skill and in his feeling of accomplishment, and that job enlargement (a more commonly used term) may mean loading the employee down with more to do, while providing him no opportunity to grow [Ref. 15].

Job enlargement is referred to as "horizontal" job loading, and a possible demotivator, whereas job enrichment is referred to as "vertical" job loading and a motivator [Ref. 3:p. 16]. Herzberg recommends the following guidelines for an effective job enrichment program:

<u>Principle</u>	<u>Motivators Involved</u>
1. Removing some controls while retaining accountability	Responsibility and personal achievement

- | | |
|--|--|
| 2. Increasing the accountability of individuals for their own work | Responsibility and recognition |
| 3. Giving a person a complete natural unit of work (module, division, etc.) | Responsibility, achievement, and recognition |
| 4. Granting additional authority to employees in their activities: job freedom | Responsibility, achievement, and recognition |
| 5. Making periodic reports directly available to the worker rather than to the supervisor | Internal recognition |
| 6. Introducing new and more difficult tasks not previously handled | Growth and learning |
| 7. Assigning individuals specific or specialized tasks, enabling them to become experts. [Ref. 16] | Responsibility, growth, and advancement |

Herzberg's "motivator-hygiene" theory has been criticized by some motivational theorists. Gautschi (1987) argued that employee satisfaction and increased productivity do not necessarily go hand-in-hand. He provides four employee "characters" that combine productivity with a healthy employee attitude:

1. High Productivity/Low satisfaction – an employee is very productive because they are afraid of losing their job.
2. Low productivity/Low satisfaction – an employee does not produce because they are unhappy, nor are they afraid of losing their job.
3. Low productivity/High satisfaction – an employee likes his job and benefits, but does not feel pressured to produce.

4. High productivity/High satisfaction – a happy and productive employee. [Ref. 17]

3. Theory X and Theory Y

Douglas McGregor, in 1960s, studied the certain assumptions that the managers make about workers. He theorized that these assumptions help to explain why managers behave in certain ways. These two assumptions that shows two different leadership styles are known as “Theory X” and “Theory Y.” The traditional authoritarian view relates to Theory X, and the progressive approach relates to Theory Y. Theory X managers believe that people are generally lazy and must be forced or pressured to work. Theory Y managers, however, believe people are generally sincere, honest, and anxious to work. If a worker has not satisfied the lower level needs, both types of managers can get workers to perform; however, if a worker has reached a higher level of needs, this worker will not respond to the Theory X management style. Theory X is based on the following assumptions: [Ref. 18]

1. Average persons have a dislike of work and will avoid it if they can.
2. Individuals must be coerced, controlled, directed, or threatened with punishment to get them to put forth adequate effort toward the achievement of the organizational objectives.
3. The average human prefers close supervision, wishes to avoid responsibility, has relatively little ambition, and wants security above all.

Theory Y is based on the following assumptions:

1. Physical and mental effort in work is as natural and rewarding as play or rest.

2. External control and threats are not the only methods to get workers to meet organizational goals.
3. Commitment to objectives depends on rewards and expectations of rewards.
4. Under proper conditions, average workers learn to accept and to seek responsibility.
5. The capacity to exercise a high degree of imagination, ingenuity, and creativity in problem solving is widely, not narrowly, distributed in the population.
6. The intellectual potential of the average person is only partially used on most jobs.

McGregor continually clarified one point that “Theory X and Theory Y are not polar opposites; they do not lie at extremes of a scale. They are simply different cosmologies.” [Ref. 15] Both theories may work best under different conditions. For example, Theory X may work best for unskilled workforce while Theory Y may work best for highly skilled workforce.

4. Achievement Motivation Theory

In 1960's, McClelland developed an alternative view of motivation, similar to Maslow's theory. McClelland proposed that humans have four important needs: autonomy, achievement, affiliation, and power. Autonomy and affiliation relates to Maslow's lower level needs while achievement and power relates to Maslow's two highest level of needs.

McClelland states that people are motivated according to the strength of their need to perform in terms of a standard of excellence or their need to succeed in competitive situations. Almost all people have an achievement motive, however few people is strongly motivated for achievement. The amount of achievement an individual has is dependent on the same factors that influence behavior. With the need of achievement also exists the fear of failure. The individual associates certain actions with success and therefore will likely repeat those actions. On the flip side, an individual will unlikely repeat an action that he associates with failure. [Ref. 10:p. 36]

McClelland identified personality characteristics of high achievers. He stated that the need for achievement could be learned through developing an environment in which it is possible to overcome obstacles and see accomplishment. The following represents McClelland's characteristics of high achiever and can be utilized to identify individuals who may be motivated by the higher level needs:

1. Establishes realistic goals
2. Works on problems, instead of leaving them to chance
3. Willingly takes moderate risks
4. More concerned with personal achievement than rewards of success
5. Prefers receiving performance feedback
6. Thinks about better ways of doing things
7. Often from middle class family and first born child [Ref. 19]

5. Equity Theory

Employees are seldom passive observers of the events that occur in the workplace. They form impressions of others and the events that affect them and cognitively or behaviorally respond based on their positive or negative evaluations [Ref. 6:p. 89]. Adams, in 1965, proposed a theory of work motivation drawn from the principle of social comparison; how hard a person is willing to work is a function of comparisons to the effort of others [Ref. 20]. Individuals compare the ratios of their own inputs and outcomes to similar ratios of "others." This theory is simply given by the following equation:

$$\frac{\textit{Outcome (self)}}{\textit{Input (self)}} = \frac{\textit{Outcome (other)}}{\textit{Input (other)}}$$

The major components of the theory are inputs and outcomes. Inputs may include previous work experience, education, effort on the job, training, intelligence, seniority, skill, and so on. Outcomes may include pay, benefits, working conditions, status symbols, seniority benefits, supervisory treatment, job assignments, and so forth. Equity exists whenever the ratio of a person's outcome to inputs equals the ratio of outcomes to inputs for others. Inequity exists whenever the two ratios are unequal. It is important to note that the conditions necessary to produce equity or inequity are based on the individual's perceptions of inputs and outputs. In behavioral terms, the objective characteristics of the situation are of less importance than the person's perceptions. Inequity does not necessarily exist if person has high inputs and low outcomes as long as

the comparison “other” has a similar ratio [Ref. 6:p. 92]. The major postulates of the theory can be summarized as follows:

1. Perceived inequity creates tension in the individual.
2. The amount of tension is proportional to the magnitude of the inequity.
3. The tension created in the individual will motivate him or her to reduce it.
4. The strength of the motivation to reduce inequity is proportional to the perceived inequity. [Ref. 21]

In other words, the presence of inequity motivates the individual to change the situation through behavioral means in order to re-establish the equity. Adams describes the following actions that illustrate how individuals can reduce inequity:

1. Increase their input if it is low relative to “other’s” input and to their own outcome.
2. Decrease their input if it is high relative to “other’s” input and their own outcome.
3. Increase their outcome if it is low relative to “other’s” outcome and their input.
4. Decrease their outcome if it is high relative to “other’s” outcome and their input.
5. “Leave the field” (quit) when inequity is experienced, especially if equity can only be achieved at a high personal cost.
6. Psychologically distort their input and outcome, increasing or decreasing them as required.
7. Change referent “other” to another when inequity is experienced.
8. Increase, decrease, or distort the input and outcome of “others,” or force “others” to leave the field. [Ref. 22]

Many motivational theorists have expressed concerns over the implication of the theory. The research on equity has addressed the outcome of financial compensation up

to date. Yet financial compensation is only one of many outcomes derived from a job. Most studies have found fairly strong support for the underpayment predictions but less support for the overpayment ones. In theory, feelings of overpayment will cause a person to work harder to produce more or higher quality products. However, research has shown that such feelings do not last very long. It takes a large increment in pay for people to feel overpaid while it takes a small decrement in pay for people to feel underpaid. [Ref. 20]

6. Expectancy Theory

Vroom, in 1964, brought VIE (Valence – Instrumentality – Expectancy) theory, also known as Expectancy Theory, into the arena of motivation research. In the past 30 years, expectancy theory has gained more acceptance among researchers than many of the other motivation theories. Expectancy theory is a cognitive theory. Each person is assumed to be a rational decision-maker who will expend effort on activities that lead to desired rewards [Ref. 20]. The theory has three major parts: (1) expectancy, (2) valence, and (3) instrumentality.

Expectancy is the strength of a person's belief about whether a particular outcome is possible. The employee may ask himself or herself the question; if I do a job well, will I get a reward? Expectancy is expressed as a probability of a desired outcome. If a person believes he or she can achieve an outcome, he or she will be more motivated, assuming that other things are equal. There are a variety of factors that contribute to an employee's expectancy perceptions about various levels of job performance. For example, the level of confidence in skills for the task at hand, the degree of help he or she

expects to receive from his supervisor and subordinates, the quality and availability of materials, are common examples of factors that can influence a person's expectancy beliefs about being able to achieve a particular level of performance. [Ref. 6:pp. 68-86]

Valences are the employee's feelings about the outcomes and are usually defined in terms of attractiveness or anticipated satisfaction. It represents the value or importance that the particular outcome has for the individual. An outcome may be "positively valent" (attracting) or "negatively valent" (dissatisfying) for an individual. The individual evaluates if the reward (outcome) is worthwhile for him or her. [Ref. 20]

Instrumentality refers to the relationship between first level outcomes, such as a promotion, and second level outcomes, such as a raise. The basic question is, "What is in it for me?" The correct answer that will result in performance is that the promotion provides the increase in pay and status, which is an outcome that a person values.

Vroom asserts that motivation involves a largely conscious three step process: (1) does the person feel that the action has a high probability of leading to an outcome (expectancy), (2) does the first level outcome produce other outcomes (instrumentality), and (3) are those outcomes of any importance to the person (valence). If the employee negatively perceives any of these steps, motivation will be lacking and the desired performance may not be achieved. So, managers must take steps to strengthen the perceived relationships between performances and outcomes. [Ref. 10:pp. 43-45]

Lawler and Porter, in 1967, added further modification factors to Vroom's model. Their study examined the performance of managers and produced a model through which they attempted to describe the factors that determined the effort a person puts into his or her job and which factors affected the relationship between effort and performance [Ref.

23:p. 19]. They determined two variables that affect the effort a person puts into his job. These two variables are value of rewards and probability that rewards depend upon effort. The first variable is defined as the attractiveness of possible rewards or outcomes to the individual while the second variable refers to an individual's subjective expectancy about the likelihood that rewards that he desires will follow from putting forth certain levels of effort. They distinguished "effort" (the amount of energy an individual expends in a given situation) from "performance" (the amount of task accomplishment). Their model, which is shown in Figure 2.2., points to two major categories of variables that combine with effort in determining performance. These two variables are abilities (including personality traits) and role perceptions. The term "ability" refers to such characteristics of the individual as intelligence, manual skills, personality traits, etc. The role perceptions refers to the kinds of activities and behavior the individual feels he should engage in to perform his job successfully. Lawler and Porter hypothesized that both abilities and role perceptions interact with effort to produce performance. [Ref. 24]

Nadler and Lawler describe three key building blocks of the theory and state that the motivation to attempt to behave in a certain way will be greatest when the following conditions are provided:

1. Performance-Outcome Expectancy: The individual believes or expects that if he or she behaves in a certain way, he or she will get certain things.
2. Valence: The individual believes that these outcomes have positive value for him or her.
3. Effort-Performance Expectancy: The individual believes that he or she is able to perform at the desired level. [Ref. 25:p. 394]

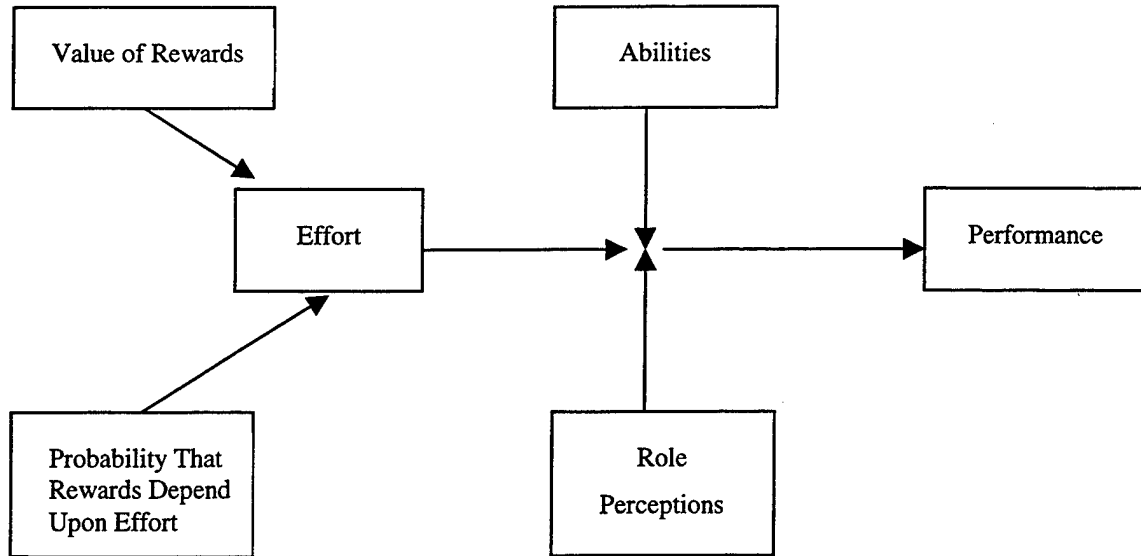


Figure 2.2. Porter and Lawler Expectancy Model [Ref. 24:p. 256]

7. Job Characteristics Theory

The job characteristics theory is based on research done by Turner and Lawrence in 1965, and refined by Hackman and Oldham in 1976 [Ref. 26:p. 10]. This theory proposes that positive personal and work outcomes (high internal motivation, high work satisfaction, high quality performance, and low absenteeism and turnover) be obtained when three “critical psychological states” are present. These states are:

- (1) Experienced meaningfulness of the work: The person must experience the work as generally important, valuable, and worthwhile.
- (2) Experienced responsibility for the outcomes of the work: The person must feel personally responsible and accountable for the results of the work done.

- (3) Knowledge of the results of the work activities: The individual must have understanding, on a fairly regular basis, of how effectively he or she is performing the job. [Ref. 27:p. 2, and Ref. 28:p. 48]

The three psychological states are created by five “core” job characteristics: skill variety, task identity, task significance, autonomy, and feedback. Skill variety is the degree to which a job requires a variety of different activities in carrying out the work, which in turn involve the use of a number of different skills and talents by the individual. Task identity refers to the extent to which the job requires completion of a “whole” and identifiable piece of work, that is, doing a job from beginning to end, with a visible outcome. Task significance is the degree to which the job has a substantial impact on the lives or work of other people, whether in the immediate organization or in the external environment. These three characteristics of the job contribute to how meaningful the employee perceives the work to be. Fourth characteristic, autonomy, is defined as the degree to which the job provides substantial freedom, independence, and discretion to the individual in scheduling work and in determining the procedures to be used in carrying it out. Autonomy contributes to feel strong personal responsibility for both successes and failures that occur on the job. The last characteristic, feedback from the job, is the extent to which a worker gets information on his or her performance from the task itself and leads to knowledge of results. [Ref. 29:p. 5]

Essentially, Job Characteristics theory states that “the more the individual experiences meaningfulness, responsibility, and knowledge of results, the greater will be his or her personal work motivation, quality of performance, and work satisfaction. However, individual differences in skill, knowledge, and personal needs for growth are

recognized as influences affecting the impact of job characteristics on work behavior and attitudes.” [Ref. 29:p. 5] Relationships among core job characteristics, critical psychological states, and on-the-job outcomes are presented in Figure 2.3.

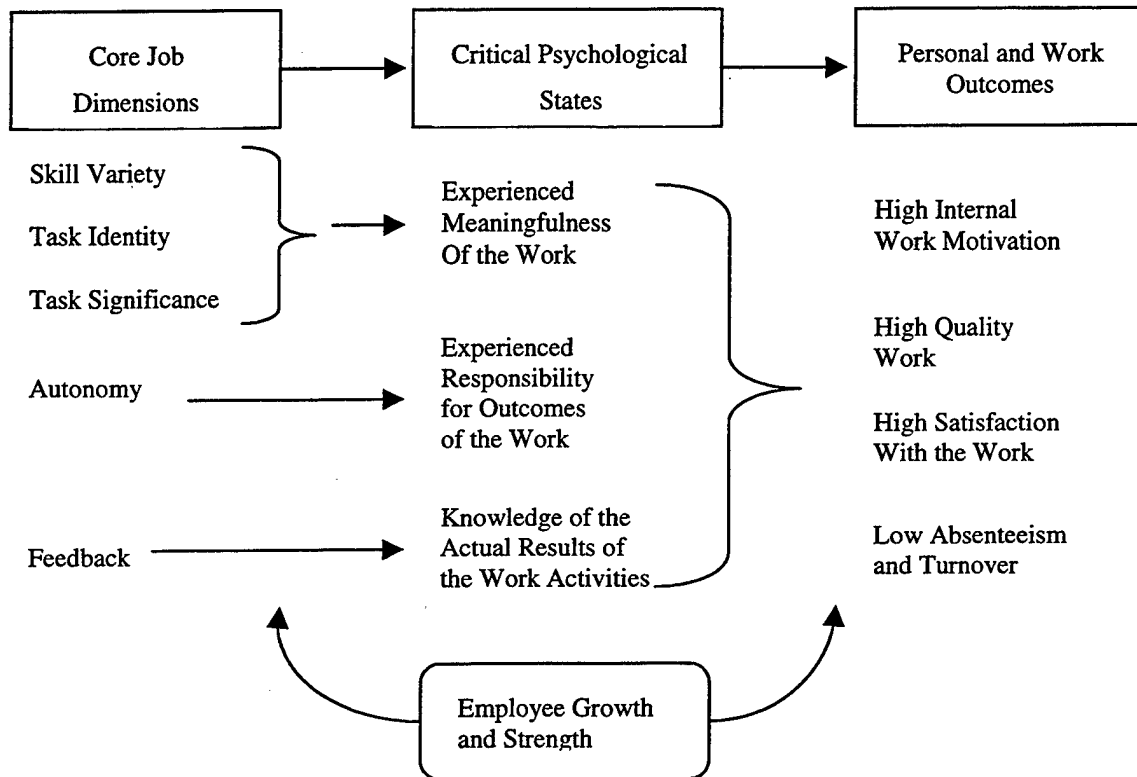


Figure 2.3. The Job Characteristics Model of Work Motivation [Ref. 28:p. 48a]

A more recent theory of intrinsic motivation (Thomas, 1993, and Tymon, 1995) integrated Deci and Ryan’s “Cognitive Evaluation Theory” and Hackman and Oldham’s “Job Characteristics Model.” This theory identified four distinct “intrinsic rewards” that individuals can receive from work tasks: senses of choice, competence, meaningfulness, and progress. *Choice* is the extent to which an individual’s behavior is seen as self-determined. *Competence* is the degree to which the individual perceives that he or she

can skillfully perform the task activities required by the job. *Meaningfulness* is the value or worthiness that the task holds for the individual when judged against the individual's own value system or standards. *Progress* is the accomplishment that the individual feels in achieving the task purpose. Each of these four intrinsic rewards must be present for intrinsic motivation to take place. Choice and competence are asserted to come from task activities-as in cognitive evaluation theory. Meaningfulness and progress, in contrast, have to do with the task purpose-as in the job characteristics model. Competence and progress are senses of accomplishment-how well one is performing task activities and attaining the task purpose, respectively. Choice and meaningfulness, in contrast, are rewarding senses of task opportunity being able to use one's own judgment and to pursue a worthwhile purpose, respectively. These relationships are shown in Table 2.2. [Ref. 30:pp. 13-15, and Ref. 31:p. 10]

	Opportunity Elements	Accomplishment Elements
Task Activities	Sense of CHOICE	Sense of COMPETENCE
Task Purpose	Sense of MEANINGFULNESS	Sense of PROGRESS

Table 2.2. An Integrative Model of Intrinsic Task Motivation [Ref. 30:p. 14]

8. Goal Setting Theory

Goal setting is a simple, straightforward, and highly effective technique for motivating employee performance. In simple terms, goal setting is the "assignment of a

specific amount of work to be accomplished – a specific task, a quota, a performance standard, an objective, or a deadline.” [Ref. 25:p. 433] Goal setting is a three step process that leads to motivation and performance: (1) setting “SMART” goals, (2) obtaining employee commitment, and (3) monitoring, support, and feedback [Ref. 7:p. 205]. Figure 2.4 presents the Locke and Latham’s comprehensive goal-setting model.

First step involves setting “SMART” goals, which means goals must be (1) specific, (2) measurable, (3) achievable but challenging, (4) reasonable, and (5) timely [Ref. 7:p. 204]. First, goals must be assigned prior to performance and should be specific. Telling an employee that he needs to do better job is not much helpful for him. But telling an employee that he should increase the production by 5% provides a specific target. Second, there should be a measurement criterion for a goal. Telling a production employee to decrease his faulty products by 10% will be more helpful than telling him that he needs to make fewer defective products. The word “fewer” is not precise and may lead confusion based on employee perception. Third and fourth, the goal must be challenging yet reachable and reasonable. Locke and Latham’s theory of goal setting states that more difficult goals lead to higher levels of job performance [Ref. 20:p. 346]. In contrast, if the goals are perceived as unreasonable and unreachable, the employees won’t accept them. Fifth, the goals should have an appropriate time frame. Employees must have a reasonable deadline for achieving the targeted goals.

Second step involves employee participation in goal setting to gain commitment and acceptance. Participative goal setting further increases the employee commitment and performance for two reasons. First, it increases employee perception to the goals as fair and reasonable, thus preventing employee resistance. Second, the employee gets a

feeling of pride and satisfaction from the experience of reaching a challenging but fair performance goal.

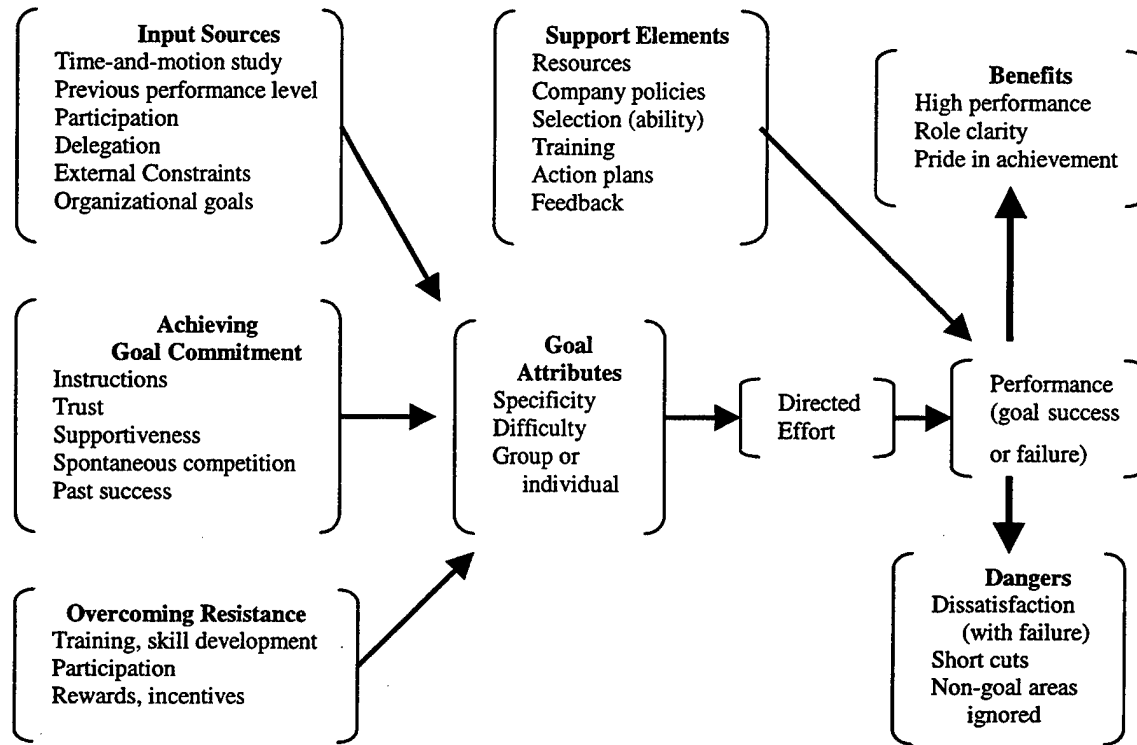


Figure 2.4. Goal Setting Model (Latham & Locke) [Ref. 25:p. 443]

The final step in goal setting is monitoring and providing feedback and support after the goals are set. Monitoring allows the manager to see whether the employee is progressing well. The supervisor must make sure that the employee has sufficient ability and knowledge to be able to reach the goal. Appropriate and timely feedback should be provided to employee so that he will know to what degree he is reaching or falling short of his goal. This will help to adjust his level of effort or strategy accordingly. [Ref. 25]

Locke, Shaw, Saari, and Latham's (1981) goal setting research concluded that goal setting improved task performance when (1) subjects have sufficient ability, (2) feedback is provided on progress in relation to goals, (3) rewards are given for goal attainment, (4) management is supportive, and (5) individuals accept assigned goals. [Ref. 20:p. 349]

C. SUMMARY

This chapter has briefly examined the motivation process and some of the more popular motivation theories. Variables that affect motivation can be found at three levels within an organizational environment. First, some variables are unique to the individual himself or herself (such as attitudes and interests). Second, some variables arise from the nature of the job (such as degree of control and level of responsibility). Third, other variables are found in the organizational environment (such as organizational climate and system wide rewards). [Ref. 6:p. 577]

The most well known theory of motivation is Maslow's "Hierarchy of Needs." Maslow identified five basic sets of needs and ranked them into a hierarchy. These needs, beginning from bottom, are physiological needs, safety and security needs, social needs, esteem needs, and self-actualization. His theory states that once a need has been satisfied it can no longer serve as a motivator of behavior. Other needs then come to the fore and behavior is directed toward their satisfaction.

Herzberg's two factor (motivator-hygiene) theory distinguished satisfaction and dissatisfaction factors as separate dimensions. First factor, motivator needs, satisfies Maslow's higher level needs while hygiene factors satisfies Maslow's lower level needs.

Herzberg states that hygiene needs, such as pay and security, cause dissatisfaction when absent but do not motivate when present. So, hygiene factors should be adequately provided but should not be used for motivational purposes thereafter.

Douglas McGregor categorized the assumptions that the managers make as "Theory X" and "Theory Y" to explain why the managers behave in certain ways. He states that Theory X managers believe that people are generally lazy and must be forced to work while Theory Y managers assume people are honest and eager to work. Theory X is the general management style in the navy, actually in military, currently although shifting to Theory Y slowly. Other theoretical concepts include:

Achievement Motivation Theory: McClelland proposed that humans have four important needs: autonomy, achievement, affiliation, and power. He states that people are motivated according to the strength of their need to perform or succeed in competitive situations.

Equity theory: Equity theory centers on the relationship between individual characteristics and work environment characteristics. It is based on the social comparison, that is, how hard a person is willing to work is a function of comparisons to the efforts of others.

Expectancy theory: Expectancy theory deals with the three sets of variables: individual, job, and work environment. Based on this theory, motivation is greatest when the individual believes that (1) if he behaves in a certain way he will get certain outcomes (performance-outcome expectancy), (2) these outcomes have positive value for him (valence), (3) he is able to perform at the desired level (effort-performance expectancy).

Job Characteristics Theory: This theory states that the more the individual experiences meaningfulness, responsibility, and knowledge of results, the greater will be his or her personal work motivation, quality of performance, and job satisfaction.

Goal Setting Theory: Locke and Latham's goal setting concept simply proposes that setting specific, measurable, reasonable, and achievable but challenging goals when combined with employee commitment, support and feedback will improve the work motivation and task performance.

D. CONCLUSIONS ON MOTIVATION THEORIES

The purpose of all motivation theories is to explain human behavior and show direction for managers to increase the level of motivation by utilizing them. The basic assumption in motivation concept is that "Motivation of employee is important for productivity, quality of work, and accomplishing the mission and objectives." Several other conclusions, but not all, that can be drawn from motivation theories are as follows:

1. Numerous theories of motivation have been developed, each with its own merits. Many of the theoretical approaches are complementary rather than contradictory. So, an effective manager can utilize elements from many different theories instead of applying one certain theory to a given situation.
2. There is no simple formula to motivate employee since each individual has unique characteristics and may be motivated by different approaches.

3. Financial incentives should be provided but should not be thought as motivators if not necessary, or should be approached carefully. Even though the money is a good incentive it is quite costly.
4. Employees see a clear relationship between their performance and outcomes. So, management should be able to identify superior performers and reward them accordingly to keep their performance level high.
5. Managers are not in a position to change an individual's personality, therefore they must concentrate on methods to focus an individual's efforts to meet organizational objectives. [Refs. 3, 6, and 32]

III. METHODOLOGY

This chapter describes the methodology used to conduct this research. Specifically, the design and administration of the survey questionnaire, the target population, the categorization of survey questions, and the data analysis are discussed in the following sections.

A. SURVEY DESIGN AND ADMINISTRATION

The primary research instrument was a questionnaire designed to obtain information on the factors, extrinsic and intrinsic, that may influence the performance of petty officers in the Turkish and U.S. Navies. The author performed a comprehensive review of relevant material on motivation in an attempt to better understand previous research. Some of the questions in the questionnaire were selected from existing instruments when possible. In addition, the author included specific questions based on personal experience to modify the questionnaire for a Navy environment.

The questionnaire, which consisted of 50 questions, was divided into two major sections. The first section included questions one through forty-six and provided a large portion of data. These questions consisted of a seven-point (Likert-type) scale on which the respondent would indicate the extent of agreement or disagreement with a given statement (1= "strongly disagree" through 7= "strongly agree"). Once familiar with the scale, a respondent was able to answer a large number of questions in a short period of time. The topics addressed in this section included: pay and benefits, recognition, promotion, commitment, meaningful work, progress, autonomy, rewards, job security,

teamwork, communication, stress, pressure, decision-making, competency, training, feedback, quality of life, job satisfaction, and leadership.

The second section, questions 47 through 49, asked the respondents to identify five items that they considered most important for petty officers' motivation, dissatisfaction, and decision about leaving the Navy. In addition, one open-ended question (Q50) was added into the questionnaire in order to provide the respondents a chance to present their own comments and inputs for the research. Appendix A contains the survey questionnaire sent to the target population.

The questionnaire was pre-tested to assess the clarity and understanding of both the questions and instructions. Separate, face-to-face interviews were conducted with two Turkish and two U.S. Navy officers to obtain their views about the content and clarity of questions. Based on their recommendations, the questionnaire was modified before distribution to the subjects.

The questionnaires were confidential and anonymous to allow the respondents to be as honest as possible. The respondents were asked to rate the survey questions at face value from a petty officer's point of view. The instructions emphasized that the respondents were not to answer the questions from their point of view as officers; rather, they were to indicate how they think petty officers would rate each of the statements. This study examines the motivation issue in a general sense and does not include the trends that may vary based on differing ranks, pay levels, duty stations, and branches among petty officers.

B. TARGET POPULATION

The subjects participating in this study were limited to Lieutenant Junior Grades, Lieutenants, and Lieutenant Commanders in the U.S. Navy, and Lieutenant Junior Grades in the Turkish Navy. The questionnaires were distributed to target population in two complementary ways. First, the list of mailbox addresses of the U.S. Navy and Turkish Navy officers at the Naval Postgraduate School was obtained. A printed questionnaire was placed in the mailboxes of 100 randomly-selected U.S. Navy officers. The same method applied to a sample of 43 Turkish Navy officers, with the addition of "Turkish Navy" written at the top of the cover page in order to differentiate them from the U.S. respondents. The subjects were given two weeks, from March 20 to April 5, 1999, to complete the questionnaire and return it to the author's mailbox. In addition to the method above, the questionnaires also were distributed to the Turkish Navy respondents by way of e-mail to increase the response rate. Thus, Turkish Navy officers had a choice of either returning the completed questionnaire by e-mail or by placing in the author's mailbox—but not both.

Of the 100 U.S. Navy officers surveyed, forty-one officers turned in the questionnaire by the deadline with a 41-percent return rate. Of the 43 Turkish Navy officers surveyed, thirty-five officers turned in the questionnaire by the deadline, an 81-percent return rate. All of the questionnaires returned were completed according to the instructions provided on the first page of the survey and, thus, were utilized for this study.

C. CATEGORIZATION OF SURVEY QUESTIONS

The first forty-six questions on the questionnaire were divided into six major categories, dealing with six factors: leadership and communication; decision-making; work place climate; job satisfaction; the work itself; and rewards and benefits. Each factor includes a different number of variables that measure different aspects of motivation. Table 3.1 lists the survey questions that apply to each of the six primary categories. Although some variables may fit under more than one factor, each variable is included only once to make the analysis easier.

The remaining three questions, 47 through 49, which assess motivators, demotivators, and reasons for leaving the Navy, were analyzed separately. The variables that each question includes are presented in Appendix A.

D. DATA ANALYSIS PROCEDURE

After collection of the questionnaires, the raw data were entered into the computer. For the first forty-six questions, the data were sorted by responses to each individual question. Thus, the mean of the means for each individual question was computed separately. Then, the questions were grouped according to the six categories mentioned above and sorted based on their mean values. Chapter IV provides the sorted mean values of the responses to the questions in each category by the U.S. and Turkish Navy subjects. Appendix B and C contain a complete table of means for each question.

For questions 47 through 49, the frequency of selection for each item in the questions was computed. Then, the items in each question were sorted based on the frequency of selection by the subjects (see Chapter IV).

CATEGORIES	SURVEY QUESTIONS
1) Leadership and Communication Leadership Communication	Q33, Q34, Q35, Q36, Q37, Q38, Q39, Q40, Q41
2) Decision Making	Q1, Q2, Q3
3) Work Place Climate Stress Innovation Pressure Uncertainty Responsibility Problem Solving	Q17, Q22, Q24, Q27, Q29, Q30, Q32
4) Job Satisfaction Quality of Life Work Satisfaction Respectful Job	Q9, Q10, Q11, Q14, Q15, Q23, Q43, Q44, Q45
5) The Work Itself Meaningfulness Impact Competence Training Commitment Challenging Job Conflict	Q4, Q5, Q6, Q7, Q8, Q16, Q19, Q31, Q42
6) Rewards and Benefits Pay and Benefits Recognition Promotion Fairness	Q12, Q13, Q18, Q20, Q21, Q25, Q26, Q28, Q46

Table 3.1 Categories of Survey Questions

IV. SURVEY ANALYSIS AND FINDINGS

A. SURVEY RESULTS

The survey questionnaire (see appendix A) was distributed to 100 U.S. officers and 43 Turkish officers currently studying at the Naval Postgraduate School. The subjects were given two weeks, from March 20 to April 5, 1999, to complete and return the questionnaire. The subjects were Lieutenant Junior Grades, Lieutenants, and Lieutenant Commanders in the United States and in the Turkish Navies. Of the 100 U.S. officers and 43 Turkish officers who were surveyed, forty-one U.S. officers and thirty-five Turkish officers turned in the questionnaire by the deadline, a 41-percent and 81-percent return rate, respectively. All of the questionnaires returned were completed according to the instructions provided on the first page of the survey and were utilized for this study.

The first forty-six questions on the questionnaire focused on six factors: leadership and communication; decision-making; work place climate; job satisfaction; the work itself; and rewards and benefits. Each factor included a different number of variables. Questions 47 through 49, which assessed motivators, demotivators, and reasons for leaving the Navy, were analyzed separately.

This research was a descriptive study of motivational factors among petty officers in the United States and Turkish Navies. Analysis of the results were based on the sample mean values to the questions, by the sample Navy officers, from the two different nations, hence, cultures. The following sections present the data collected and the findings from the analyses of these data.

B. PRESENTATION OF DATA

1. Leadership and Communication

Leadership and communication play an important role in employee motivation. Studies have shown that the most important factor affecting human motivation is the management style used by managers. In reality, there is no “right” style of leadership that works for every situation. Leaders must be flexible in their management style to adapt to the changing work climate and social values. Perhaps the oldest and most widely used management style in the military is directive-authoritarian, which centralizes power and decision-making. High opportunity costs in a zero-defect environment force military managers to closely supervise their subordinates to prevent mistakes, even though subordinates may seek supportive leadership in a learning environment.

Communication is considered the exchange of information between people—upward, downward, and horizontal information flow. Truly effective communication both minimizes the distortion of information and creates subordinates that understand their goals and objectives better. Open communication channels between seniors and subordinates provide continuous feedback for both. Good communication improves subordinates’ work performance and satisfaction and seniors’ effectiveness in leadership, while reducing misunderstandings and wasted time.

The questionnaire contained questions on leadership and communication for the reasons stated above. Mean values to the leadership questions by the U.S. and Turkish Navy officers are presented in Table 4.1 and Table 4.2, respectively. Both U.S. and Turkish officers rated question 41 (Q41) high, with means 5.07 and 5.49 respectively,

indicating that they think petty officers have good communication with their subordinates. Data on Q41 was considered a negative skew, which means that most of the respondents rated communication above the mid-point (four). Turkish officers also indicated slightly positive feelings about Q39 (mean score=4.69); that is, they think petty officers are well informed about the content of their job. However, both sets of officers rated Q33, Q35, Q37, Q38, and Q40 neither high nor low tendencies, with mean values near four (4.0). They either slightly agreed or slightly disagreed to the statements, resulting in a mean score close to the mid-point. U.S. officers gave a slightly low rating to Q34 (with a mean 3.32), indicating that they think petty officers are not provided adequate and timely feedback on their performance. Turkish officers did not feel strongly about assigning work equitably among petty officers (Q36), with a mean score of 3.43. The mean scores on the leadership and communication questions generally fell around four (mid-point), which makes a definitive conclusion more difficult to reach. This might indicate that both U.S. and Turkish Navy officers did not have strong feelings about the leadership styles used. This may be a result of a directive management style used in both navies, which tries to provide effectiveness, while ignoring the communication needs of subordinates.

Question #	Leadership and Communication	Mean Values
41	Good communication with subordinates	5.07
38	Respectful treatment	3.95
35	Adequate support from seniors	3.76
33	Seniors listen to and value their opinions	3.68
37	Seniors concerned about their skill improvement	3.66
39	Clearly explaining the job	3.63
36	Assigning work equitably	3.61
40	Units provide all the necessary information	3.54
34	Providing adequate and timely feedback	3.32

Table 4.1. Responses To Leadership and Communication Questions (U.S. Navy)

Question #	Leadership and Communication	Mean Values
41	Good communication with subordinates	5.49
39	Clearly explaining the job	4.69
35	Adequate support from seniors	4.34
33	Seniors listen to and value their opinions	4.29
38	Respectful treatment	4.06
40	Units provide all the necessary information	3.97
37	Seniors concern about their skill improvement	3.71
34	Providing adequate and timely feedback	3.69
36	Assigning work equitably	3.43

Table 4.2. Responses To Leadership and Communication Questions (Turkish Navy)

2. Decision Making

For a complete understanding of this factor, the following information is provided. Among many decision-making systems, three are significant in the military: 1) the top-down approach, where top-level managers make the decisions and tell subordinates what the decision is and how it should be implemented; 2) the consultative approach, where top-level managers make decisions, but ask for input from subordinates; and 3) upward communication, where subordinates are expected to propose ideas to top-level managers, who ultimately make the final decisions. The participative decision-making process involves subordinates' inputs at all levels. Some of the benefits of participative decision making in an organization can be summarized as follows:

1. A sense of responsibility for the work is created.
2. Group communication is enhanced.
3. Subordinates' hidden talents are exercised, and their skills are utilized.
4. The number of possible ways to achieve the job objectives increases.
5. The leaders' abilities are supplemented by those of the subordinates. [Ref. 33]

The study included questions on petty officers' decision making processes. Summaries of the responses to decision-making questions are presented in Table 4.3 and Table 4.4. Both the U.S. and Turkish Navy officers slightly disagreed with the statements in Q1, Q2, and Q3. They felt that petty officers rarely make decisions concerning their job, rarely choose how their work gets done, and do not set their own task priorities. These results are not surprising in a military organization that would exercise an authoritarian management style, and task priorities are determined by seniors.

Question #	Decision Making	Mean Values
2	Petty officers make decisions concerning their job	3.46
1	Petty officers choose how their work gets done	3.20
3	Petty officers set their own task priorities	2.56

Table 4.3. Responses To Decision-Making Questions (U.S. Navy)

Question #	Decision Making	Mean Values
3	Petty officers set their own task priorities	3.37
1	Petty officers choose how their work gets done	3.34
2	Petty officers make decisions concerning their job	3.17

Table 4.4. Responses To Decision-Making Questions (Turkish Navy)

3. Work Place Climate

Work place climate referred to the perception of the psychological attitudes and conditions in the organizational environment. It is usually discussed in terms of how members of the organization perceive this qualitative factor. Although climate is shaped by a variety of organizational factors, the climate itself impacts both individual and group performance. The dimensions of climate included in this study are stress, innovation, pressure, uncertainty, responsibility, and problem solving. Stress was considered to be the result of a high demand and low autonomy work environment. The consequences of stress involve the health and performance of the individual both on the job and in other

life roles. Another aspect of climate is responsibility, one of the most important drivers in the work place. When it is easy for people to make excuses, their sense of responsibility toward the work tends to evaporate. In addition, most people become intent on finding excuses for avoiding responsibility when the work goes badly. The people who are actually responsible for a job are generally more motivated to achieve the work objectives than those who are not responsible.

The answers to work place climate questions Q17 and Q30 differed between the U.S. and Turkish Navy officers. The number-one priority of the U.S. Navy officers was Q17, which indicates that there is too much stress on board ship (with a mean of 5.93). Although the Turkish Navy officers rated Q17 high, with a mean of 4.89. Their number-one issue was Q30 (mean score=5.14), the problem-solving issue. Turkish Navy officers felt subordinates usually refer problems to their superiors. Once again, this result was not surprising in a centralized management system. The lack of decision-making authority forces petty officers to refer problems to their superiors. Both the U.S. and Turkish Navy officers rated Q22 (innovation ordered by top management) second highest from the top (mean scores=5.20 and 5.11, respectively). Both groups of Navy officers believed that petty officers have a perception that innovation is supported or directed by top management at the work place. This perception may cause subordinates to expect innovation only from top management and to underutilize their own abilities in this area. The data in Q17, Q22, and Q24, for the U.S. Navy, and Q22 and Q30 for the Turkish Navy are negative skews; that is, most of the respondents scored above the mid-point on these questions. Other mean values to the work place climate questions had scores varying between 4.60 and 5.10, and were very similar between the two Navies. The

respondents tended to slightly agree to the statements, which meant: (1) petty officers are sometimes given duties that they have no knowledge of; (2) there are uncertainties in quality of performance or techniques to be done; (3) there is generally an urgency about getting things done on the ship; and (4) people tend to avoid responsibility for the challenging jobs. A complete table of mean scores to work place climate questions for the U.S. and Turkish Navies are presented in Table 4.5 and 4.6, respectively.

Question #	Work Place Climate	Mean Values
17	Too much stress	5.93
22	Innovation is ordered by top management	5.20
24	Urgency about getting things done	5.17
32	Petty officers are given duties they have no knowledge of	4.88
27	Too many uncertainties in their job	4.85
29	People avoid responsibility	4.68
30	People refer problems to the superiors	4.66

Table 4.5. Responses To Work Place Climate Questions (U.S. Navy)

Question #	Work Place Climate	Mean Values
30	People refer problems to the superiors	5.14
22	Innovation is ordered by top management	5.11
27	Too many uncertainties in their job	5.03
24	Urgency about getting things done	4.97
17	Too much stress	4.89
29	People avoid responsibility	4.83
32	Petty officers are given duties they have no knowledge of	4.60

Table 4.6. Responses To Work Place Climate Questions (Turkish Navy)

4. Job Satisfaction

Job satisfaction, a general term used for individuals' perceived satisfaction in their work, may mean different things to different people. There is a strong relationship

between work motivation and job satisfaction. It was found that one of the best predictors of work motivation was job satisfaction. Job satisfaction has many dimensions, including quality of life, work satisfaction, and having a respected job. The interaction between work and other aspects of life, for example, has a direct impact on individuals' job satisfaction. In particular, work-family conflicts are of major concern. Work and family interact with each other; that is, work factors have impact on family matters, and vice versa. Family concerns may even cause some employees to leaving their jobs. Conversely, additional factors, such as a positive public perception of and respect for a particular job, may give workers more job satisfaction.

The job satisfaction questions included a question on family separation (Q44) assessed as to its importance to petty officers. As expected, both the U.S. and Turkish Navy officers rated this question high (with a mean of 6.49 and 6.26, respectively), indicating family separation is a big concern for petty officers. This result is consistent with the discussion above. Navy personnel may have difficulty deciding between job and family when long duty periods result in long separations.

Both the U.S. and the Turkish Navy respondents also rated Q11 (mean scores=5.90 and 5.49, respectively) high, which indicates that petty officers had a sense of personal satisfaction when they do a job well. This result is also consistent with other motivational studies done in industrial organizations. According to "Achievement Motivation Theory," success leads to motivation and, in turn, increases individuals' achievement further. On Q23, which deals with adequate notification prior to a new assignment, U.S. officers rated high (mean of 5.32), while Turkish officers rated moderate (mean of 4.26). This result is not surprising since the Turkish Navy is in a

transition phase in terms of modernization and job analyses because of the frigates purchased recently. The Turkish Personnel Department sometimes executes quick assignments to meet immediate needs of the fleet, leaving petty officers less time to prepare for operational missions.

On another question, Q4, Turkish Navy officers indicated slightly positive feelings (mean score=4.80) that petty officers intended to stay in the service until retirement, while the U.S. Navy officers "slightly disagreed," with a mean score of 3.39. However, both groups of officers stated that petty officers intend to retire when they acquired the retirement rights (Q15). Data on Q44 and Q11 in both Navies, Q23 in the U.S. Navy, and Q14 in the Turkish Navy are negative skews; that is, most of the respondents rated above mid-point (four) on these questions. However, data on Q43 in both navies, and Q45 in the U.S. Navy, are positive skews. Both groups of officers rated low on Q43, indicating that petty officers do not prefer geographic assignments. A complete list of responses to the job satisfaction questions by the U.S. and Turkish officers are presented in Tables 4.7 and 4.8, respectively.

Question #	Job Satisfaction	Mean Values
44	Family separation is a petty officer's big concern	6.49
11	Feeling of satisfaction for a well-done job	5.90
23	Adequate notification prior to departure for a new job	5.32
15	Intention for retirement	4.68
9	Satisfaction with the kind of work	4.66
10	Public respects a petty officer's job	3.68
14	Intention to stay in the Navy	3.39
43	Petty officers prefer geographic assignment	3.27
45	Best people are assigned to the best jobs	3.22

Table 4.7. Responses To Job Satisfaction Questions (U.S. Navy)

Question #	Job Satisfaction	Mean Values
44	Family separation is a petty officer's big concern	6.26
11	Feeling of satisfaction for a well-done job	5.49
14	Intention to stay in the Navy	4.80
10	Public respects a petty officer's job	4.46
9	Satisfaction with the kind of work	4.37
15	Intention for retirement	4.34
23	Adequate notification prior to departure for a new job	4.26
45	Best people are assigned to the best jobs	3.91
43	Petty officers prefer geographic assignment	2.69

Table 4.8. Responses To Job Satisfaction Questions (Turkish Navy)

5. The Work Itself

The questions related to the work itself in this study deal with meaningfulness, competence, impact, training, commitment, job challenge, and conflict. Each of these points has been presented to get a brief insight. There is a strong relationship between competence, meaningfulness, and impact, and intrinsic motivational orientation towards performance. The potential benefits of intrinsic motivation at the individual level involve flexibility, adaptation, learning, and satisfaction, which, in turn, are expected to lead to enhanced retention and performance at the unit levels.

Effective training has usually been expected to increase motivation and morale, improve safety, and reduce the supervisor's workload. Thus, it improves the overall organizational effectiveness and efficiency. On the contrary, lack of training usually may cause discouragement and dissatisfaction.

The committed employee is one who stays with the organization, puts in a full day, and shares organizational goals. As the tasks require higher-level knowledge and skills, and employees are trained accordingly, they are likely to be highly marketable in

employment opportunities. Research has shown that employees, who are committed to organizational goals, have the highest level of job satisfaction and are least likely to think about leaving. However, not every organization has an equal chance to gain employee commitment, since environments that require teamwork and organizational learning are better suited to the commitment concept.

Conflict is a process in which people disagree over significant issues, thereby creating friction between parties. Conflict is not necessarily destructive; in fact, it can be a source of renewal and creativity when based on issues, rather than on personalities. Positive consequences of conflict include high focus on the task and open discussion of issues, while negative consequences include losing sight of common goals, lack of cooperation, and focusing on winning at all costs.

The answers to the questions related to the work itself showed a very similar pattern between the two national Navies. This may be due to the fact that, despite their technological and cultural differences, the two Navies have similar work conditions. Both U.S. and Turkish Navy officers rated Q4, Q31, Q6, and Q5 high, which indicated that: 1) petty officers felt competent at their jobs; 2) seniors forced their points of view when there was a conflict among people; 3) petty officers felt that their work is important; and 4) petty officers received sufficient training to do their jobs effectively. Data on these questions have negative skews; that is, most of the respondents scored them above the mid-point (4.0), as shown in Tables 4.9 and 4.10. However, both groups of Navy officers scored Q16 low; in other words, they think petty officers do not seem to share the Navy's goals. Data on Q16 for the U.S. officers have a positive skew, which means most respondents scored it below the mid-point.

Question #	The Work Itself (U.S. Navy)	Mean Values
4	Petty officers are competent	6.05
31	Seniors force their points of view in a conflict	5.29
6	Petty officers do important work	5.17
5	They have received adequate training	5.07
42	They do challenging jobs	4.83
7	They show progress over time	4.79
8	They learn useful new things	4.73
19	Effective training occurs during exercises	4.07
16	Petty officers share the Navy's goals	2.95

Table 4.9. Responses To the Questions Related To the Work Itself (U.S. Navy)

Question #	The Work Itself (Turkish Navy)	Mean Values
4	Petty officers are competent	5.80
31	Seniors force their points of view in a conflict	5.37
6	Petty officers do important work	5.29
5	They have received adequate training	4.97
7	They show progress over time	4.94
42	They do challenging jobs	4.94
8	They learn useful new things	4.63
19	Effective training occurs during exercises	3.91
16	Petty officers share the Navy's goals	3.77

Table 4.10. Responses To the Questions Related To the Work Itself (Turkish Navy)

6. Rewards and Benefits

Reward systems and benefits can influence the motivation of individuals and lead to retention. Organizations typically relied on reward systems to achieve four objectives:

- 1) to motivate employees to perform effectively;
- 2) to motivate employees to join the organization;
- 3) to motivate employees to come to work;
- and 4) to reinforce the organizational structure by indicating the position of different individuals within the

organization [Ref. 34:p. 10]. Yet, establishing an effective reward system is difficult because it requires a good measure of performance, the ability to identify which rewards are important to particular individuals, and the ability to control the number of these rewards an individual receives. Although financial rewards may be good motivators in industrial organizations, they simply do not work in military organizations since military managers do not control the money. Therefore, military managers should devise other effective, non-monetary ways of rewarding people.

The responses to the questions about reward systems and benefits also showed a similar pattern between the two Navy groups, as shown in Tables 4.11 and 4.12. Both groups rated Q28 high; that is, they think petty officers get more intensive work after a well-done job. Since the seniors want to ensure certain standards of quality in their subordinates' work, a successful petty officer is more likely to be assigned to upcoming jobs. Another item rated high by respondents was Q18, which indicates that they think petty officers are satisfied with their job security. This feeling of security possibly results from the fact that military members can be transferred from one duty station to another without losing their jobs. However, both the U.S. and Turkish Navy officers rated Q12, Q13, Q20, and Q21 low. Although, compared with the Turkish Navy, the U.S. Navy has better economic conditions and provides better promotion opportunities to its petty officers, the U.S. petty officers do not seem to be satisfied with their current pay and promotion level. Even though a direct comparison of mean values between different cultures can mislead, the data showed that the U.S. Navy petty officers may be as dissatisfied as the Turkish Navy petty officers with their current level of pay, their promotion opportunities, and the availability of military housing. The data on Q28 and

Q18 are negative skews, while the data on Q12, Q13, Q20, and Q21 are positive skews. In addition, both the U.S. and Turkish Navy officers did not express positive feelings about performance evaluation (Q46), with means of 3.49 and 3.71, respectively, and about recognition for extra efforts on the ship (Q25), with means of 3.44 and 3.74, respectively.

Question #	Rewards and Benefits	Mean Values
28	Petty officers get more intensive work after a good job	5.61
18	They are satisfied with job security	5.02
26	They are rewarded based on performance	3.80
46	Their performance is evaluated fairly	3.49
25	They receive recognition for extra efforts	3.44
21	They are satisfied with promotion opportunities	2.68
20	They are satisfied with military housing	2.12
12	They are satisfied with pay level	2.07
13	They are satisfied with sea pay	1.98

Table 4.11. Responses To the Rewards and Benefits Questions (U.S. Navy)

Question #	Rewards and Benefits	Mean Values
28	Petty officers get more intensive work after a good job	5.54
18	They are satisfied with job security	4.94
26	They are rewarded based on performance	4.06
25	They receive recognition for extra efforts	3.74
46	Their performance is evaluated fairly	3.71
20	They are satisfied with military housing	2.91
12	They are satisfied with pay level	2.43
13	They are satisfied with sea pay	2.14
21	They are satisfied with promotion opportunities	2.14

Table 4.12. Responses To the Rewards and Benefits Questions (Turkish Navy)

7. Motivational Factors

Respondents were provided a list of nineteen motivational factors in Q47 (see Appendix A) and were asked to select the five most important factors that may influence a petty officer's motivation in a positive way. Tables 4.13 and 4.14 show the top fifteen motivational factors selected by the U.S. and Turkish officers, respectively. Since the respondents were not required to rank their choices, ranking of the motivational factors was based on the frequency (n) of the response to each item on the list.

The U.S. officers selected "recognition for superior work" as the top motivator, while Turkish officers selected "pay increase." Thirty-three out of forty-one U.S. officers and fifteen out of thirty-five Turkish officers thought that petty officers would be most motivated by recognition for superior work. Thirty out of thirty-five Turkish officers and twenty-six out of forty-one U.S. officers believed that pay increase provides the most motivation for petty officers. Both the U.S. and Turkish officers' second choice was "increasing career and promotion opportunities," (n=30 and 22, respectively). Eighteen U.S. respondents and ten Turkish respondents indicated that respectful treatment by seniors increases petty officers' motivation. Among other important motivational factors indicated by the U.S. officers were sense of accomplishment, meaningful work, more job autonomy, and teamwork within the ship. Turkish officers determined other significant motivation factors for Turkish petty officers, including increased sea pay, rewards within the ship, good communication with seniors, sailing to foreign countries, and getting more responsibility.

Ranking	MOTIVATORS (U.S. NAVY)	Frequency
1	Recognition for superior work	33
2	Increasing career/promotion opportunities	30
3	Pay increase	26
4	Respect from seniors	18
5	Sense of accomplishment	16
6	Meaningful work	15
7	More autonomy in doing job	14
8	Teamwork within the ship	11
9	Good retirement/medical plan	7
10	Training opportunities	6
11	Internal rewards within the ship	5
12	Food quality	5
13	Getting more responsibility	5
14	Increasing sea pay	5
15	Good communication with seniors	4

Table 4.13. Ranking of Motivational Factors for Petty Officers in the U.S. Navy

Ranking	MOTIVATORS (TURKISH NAVY)	Frequency
1	Pay increase	30
2	Increasing career/promotion opportunities	22
3	Increasing sea pay	19
4	Recognition for superior work	15
5	Internal rewards within the ship	12
6	Respect from seniors	10
7	Good communication with seniors	10
8	Sail to foreign countries	9
9	Getting more responsibility	9
10	Teamwork within the ship	8
11	Meaningful work	7
12	Good retirement/medical plan	7
13	Sense of accomplishment	6
14	More autonomy in doing job	5
15	Training opportunities	3

Table 4.14. Ranking of Motivational Factors for Petty Officers in the Turkish Navy

8. Dissatisfiers

Respondents were asked to determine the top five factors, among the list of twenty-one items that may cause dissatisfaction among petty officers (Q48). Dissatisfiers are the items that cause dissatisfaction when absent, but do not necessarily motivate when present, as stated by Herzberg. Pay is the most important "hygiene" factor as indicated in this study and in many others. The top dissatisfier selected by both Turkish and the U.S. officers was a low pay level (n=31 and 34, respectively). This is consistent with Maslow's Hierarchy of Needs, which states that physiological needs must be satisfied before moving into higher-level needs. Similarly, eighteen U.S. officers and fourteen Turkish officers indicated that frequent deployments caused dissatisfaction among petty officers. Ranking of other dissatisfiers showed significant differences between the U.S. and Turkish officers, as shown in Tables 4.15 and 4.16, respectively. Nineteen U.S. officers thought that uncertainty of deployments and missions caused dissatisfaction. Other important dissatisfiers indicated by the U.S. officers were no recognition for superior work (n= 18); living places and conditions at sea (n= 17); inadequate career and promotion opportunities (n= 15); disrespectful treatment by seniors (n= 14); too much stress (n= 13); and lack of support from seniors (n= 12). Although they ranked the items differently, the Turkish Navy respondents named similar factors. The Turkish Navy officers chose as the most important dissatisfiers: too much stress (n=20); inadequate career and promotion opportunities (n=15); disrespectful treatment by seniors (n=13); unfairly distributed workload (n=12); uncertainty of deployments and missions (n=10); and no recognition for superior work (n=9).

Ranking	DEMOTIVATORS (U.S. NAVY)	Frequency
1	Low pay level	34
2	Uncertainty of deployments/missions	19
3	No recognition for superior work	18
4	Frequency of deployments	18
5	Living places and conditions at sea	17
6	Inadequate career/promotion opportunities	15
7	Disrespectful treatment by seniors	14
8	Too much stress	13
9	Lack of support from seniors	12
10	Unfair rewards given to people who don't deserve	10
11	Unfairly distributed workload	7
12	Lack of autonomy in performing job	6
13	Additional duties	5
14	Low food quality	3
15	Poor retirement/medical plan	3

Table 4.15. Ranking of Dissatisfiers Among Petty Officers in the U.S. Navy

Ranking	DEMOTIVATORS (TURKISH NAVY)	Frequency
1	Low pay level	31
2	Too much stress	20
3	Inadequate career/promotion opportunities	15
4	Frequency of deployments	14
5	Disrespectful treatment by seniors	13
6	Unfairly distributed workload	12
7	Uncertainty of deployments/missions	10
8	No recognition for superior work	9
9	Living places and conditions at sea	8
10	Additional duties	8
11	Unfair rewards given to people who don't deserve	6
12	Not enough responsibility	6
13	Housing unavailability	5
14	Lack of support from seniors	4
15	Lack of autonomy in performing job	3

Table 4.16. Ranking of Dissatisfiers Among Petty Officers in the Turkish Navy

9. Commitment

The number of petty officers who intended to leave the Turkish Navy seemed to have increased over the past fifteen years. The length of compulsory duty, which is fifteen years in the Turkish Navy, had been a successful factor in retaining petty officers. However, when people are forced to stay, they get dissatisfied and, thus, may decrease their efforts to accomplish the jobs and missions. To keep petty officers committed to the military, while also keeping motivation and morale high, it is important to identify the causes of dissatisfaction that lead petty officers to leave the Navy.

Respondents were asked to select five important factors among the list of fifteen items they think they play a significant role in a petty officer's ending a navy career decision (Q49). Of the thirty-five respondents, all Turkish Navy officers selected low pay level as the major reason for leaving the Navy, while thirty-five out of forty-one U.S. respondents selected low pay as the second reason. The U.S. petty officers' primary reason for leaving the Navy, as indicated by the U.S. respondents, was disliking family separation (n=38), while the Turkish officers chose this as their third reason (n=20). In addition, attractive job opportunities outside the Navy have played an important role in the quitting decision among both the U.S. and Turkish Navy petty officers (n=34 and 22, respectively). Tables 4.17 and 4.18 show that the ranking of other important items that influence the petty officers' decision was similar in the two Navies. The most important ones were lack of career and promotion opportunities, dislike of sea duty, dislike of the environment, and not being treated with respect.

Ranking	LEAVING THE NAVY (U.S. NAVY)	Frequency
1	Dislike family separation	38
2	Low pay level	35
3	Attractive job opportunities outside the Navy	34
4	Lack of career/promotion opportunities	22
5	Dislike sea duty	17
6	Dislike the work environment	13
7	Not being treated with respect	10
8	Other family reasons	8
9	Intention to live in some place permanently	7
10	Too much unfair treatment	5
11	Lack of freedom in his job	5
12	Long compulsory duty	4
13	Too many regulations	3
14	Medical reasons (incapability)	3
15	Poor retirement plan	1

Table 4.17. Ranking of Factor That Influence Quitting Decision in the U.S. Navy

Ranking	LEAVING THE NAVY (TURKISH NAVY)	Frequency
1	Low pay level	35
2	Attractive job opportunities outside the Navy	22
3	Dislike family separation	20
4	Lack of career/promotion opportunities	19
5	Dislike sea duty	17
6	Dislike the work environment	15
7	Long compulsory duty	10
8	Not being treated with respect	9
9	Other family reasons	8
10	Lack of freedom in his job	8
11	Too much unfair treatment	5
12	Intention to live in some place permanently	4
13	Medical reasons (incapability)	3

Table 4.18. Ranking of Factor That Influence Quitting Decision in the Turkish Navy

C. SUMMARY

This chapter presented the data collected from the subjects. The first forty-six questions were categorized into six main factors, while the last three questions were analyzed separately. There were both similarities and differences among answers to the survey questionnaire by the U.S. Navy and Turkish Navy respondents.

Both the U.S. and Turkish Navy officers stated that petty officers have good communication with their subordinates. While the Turkish officers indicated that petty officers are well-informed concerning the content of their job. Neither group indicated positive feelings about assigning work equitably among petty officers, providing adequate and timely feedback, and seniors' concern about petty officers' skill improvement.

As one might expect in a military organization, the Turkish and U.S. Navy officers agreed that petty officers have little involvement in decision-making concerning their job tasks, and petty officers do not set their task priorities.

The U.S. and Turkish Navy officers had different priorities regarding work place climate. For example, the U.S. officers placed the highest importance on stress in the work place (Q17), while the Turkish officers' most important consideration was that people tended to refer problems to their superiors (Q30). The general tendency in the work place climate questions was to score above mid-point (four), which may have indicated that petty officers feel dissatisfaction with the work place climate in both Navies.

There were both similarities and differences in the answers to job satisfaction questions by the two groups. Both the U.S. and Turkish Navy officers chose as major concerns family separation and a dislike of geographic assignments. On the one hand, Turkish officers stated that petty officers intend to stay in the Navy until retirement. On the other hand, both the U.S. and Turkish Navy officers emphasized that petty officers prefer retirement whenever they acquired eligibility for retirement benefits. Additionally, the U.S. officers stated that petty officers are given an adequate notification time period prior to their departure for a new job.

The answers to the questions related to the work itself and rewards showed similarities between the two groups of respondents. The subjects stated that petty officers are generally competent, do important work, and receive adequate training. However, they also stated that petty officers are not satisfied with the level of promotion opportunities, pay, sea pay, and the availability of military housing.

The top motivators for both navy petty officers were pay increase, recognition for superior work, increasing career and promotion opportunities, and respect from seniors. The most important dissatisfiers in common were low pay, stress, frequency of deployments, no recognition for superior work, uncertainty of deployments and missions, inadequate career opportunities, and disrespectful treatment by seniors. The most important reasons for leaving the Navy among the two navy petty officers were low pay level, dislike of family separation, attractive job opportunities outside the Navy, the lack of career opportunities, and dislike of sea duty.

V. CONCLUSIONS AND RECOMMENDATIONS

A. SUMMARY OF THE RESEARCH

This study examined the factors that motivate and demotivate petty officers in the Turkish and the U.S. Navies in order to determine common areas of concern and make recommendations accordingly. An opinion survey completed by Turkish and U.S. junior officers was used to identify areas that may need improvement in the two Navies. The items in the survey—listed as motivators, dissatisfiers, and reasons for leaving the navy—were collected from the literature and from the experiences of the author and one U.S. Navy officer.

The researcher classified the motivating factors of petty officers into two groups, “motivators” and “dissatisfiers,” as described by Herzberg [Ref. 10:p. 39]. Motivators tend to be job enrichers and are expected to increase the motivation and work performance of petty officers. Dissatisfiers relate to the negative feelings associated with characteristics of the work environment, and their importance is felt most in their absence. The study indicated that the Turkish and the U.S. Navies should not only work toward removing or changing these dissatisfiers, but should also take positive steps to provide sources of motivation and satisfaction in the work place.

The most commonly named dissatisfier, in both the U.S. and Turkish Navies, was the current pay system, which seems to have not kept up with inflation. Although many managers can think pay of a motivator, it is actually the most important hygiene factor. People, especially in the military, do not relate pay to performance. Thus, while some dissatisfiers—such as the pay system—should be changed, they should not necessarily be

thought of as motivators of higher performance. This study, which focused on both intrinsic and extrinsic factors affecting motivation in the Turkish and U.S. Navies, suggests a variety of methods for increasing the motivation of petty officers in the work place.

B. CONCLUSIONS

Motivation gives direction to human behavior by arousing, sustaining, and directing it toward the attainment of some goals. Individual performance is based partly on motivation. Most motivation theories assume that people are intelligent and rational decision-makers who have good intentions. In reality, human behavior is much more complex than assumed in the motivation studies. Nevertheless, motivation theories work for most situations, and success depends largely on managers' capabilities and environmental factors that put pressure on the organization.

Generally, managers are concerned about extrinsic motivational factors, such as pay and rewards. However, this study, like many others, showed that intrinsic motivators also play an important role in increasing individual work performance. Intrinsic motivation is the motivation to work on something because it is interesting, involving, exciting, satisfying, or personally challenging. There is abundant evidence in the literature that people will be most creative when they are primarily intrinsically motivated rather than extrinsically motivated. Indeed, five of the top ten motivators in the U.S. Navy and four of the top ten motivators in the Turkish Navy were intrinsic motivators.

In this study, motivational factors for petty officers in the Turkish and U.S. Navies were found to be moderately correlated. Five of the top ten motivators were the

same: pay increase, increasing career and promotion opportunities, recognition for superior work, respectful treatment, and teamwork within the ship. Among other motivational factors for the Turkish petty officers were increasing sea pay, internal rewards within the ship, good communication with seniors, sailing to foreign countries, and getting more responsibility. The U.S. officers chose their petty officers' motivators as sense of accomplishment, meaningful work, more autonomy in the job, good retirement and medical plan, and training opportunities.

While the motivators were moderately correlated, the dissatisfiers indicated by Turkish and U.S. officers were strongly correlated. Eight of the top ten dissatisfiers were the same in the two Navies, although their ordering was different. The common dissatisfiers were: low pay level, stress, inadequate career and promotion opportunities, frequent deployments, disrespectful treatment, uncertainty of deployments, no recognition for superior work, and living places and conditions at sea.

In addition, the reasons for leaving the navy were also found to be strongly correlated between the two Navies. Eight of the top ten reasons for leaving the Navy were the same: low pay level, attractive job opportunities outside the Navy, dislike of family separation, lack of career and promotion opportunities, dislike of sea duty, dislike of the work environment, not being treated with respect, and other family reasons.

Lastly, the study identified that there is room for improvement in many areas, both in the Turkish and the U.S. Navies. Further research should be conducted in specific areas, focusing on just one factor, to determine more specific and detailed actions to take.

C. RECOMMENDATIONS

Based on the research in this thesis, the following recommendations can be made for both the Turkish and U.S. Navies:

1. Understanding human relations theories is vital in order to utilize them effectively. One of the responsibilities of seniors is to create the proper climate for subordinates so that they can increase the morale, motivation, and job satisfaction on board a ship. In order to accomplish a proper climate, the seniors need to know the types of factors that may influence the performance of petty officers. Therefore, every officer who will lead a group of people should be trained for human relations and leadership, either in the Naval Academy or during the post-duty period.

2. The seniors should establish open communication at all levels within a unit and keep the petty officers informed of the external and internal matters that they need to know. Another part of open communication is to provide sincere, adequate, timely, and specific feedback on a petty officer's performance. "Adequate" and "timely" mean immediate feedback when necessary (e.g., after important events), as well as a quarterly, rather than yearly, feedback. In addition, criticism should be constructive, including positive as well as negative feedback. Seniors should use criticism to motivate subordinates to do better, not to demoralize them.

3. Seniors should encourage participative decision-making, especially in the areas that affect petty officers' current jobs and about issues that may affect their future. Seniors should listen to and value the opinions of petty officers when making decisions.

4. Seniors should treat petty officers at all levels equitably and with respect. Petty officers who do not perform well should be assigned as assistants to the good

performers so that they can improve their skills. This will not only help to decrease the workload of good performers, but also will help provide a sense of workload equity among petty officers.

5. Turkish and U.S. petty officers should be informed of the Navy's goals and the importance of their jobs early in the training phase (e.g., Petty Officer Preparation School for the Turkish Navy). The literature concludes that Marine Corps and Special Forces all over the world have better motivation due primarily to the feeling of personal and job importance that they obtain during their recruit training.

6. The Turkish and U.S. Navies should work toward eliminating job dissatisfiers to the maximum extent possible. If the military implements motivators without removing dissatisfiers, the effectiveness of those motivators will be greatly limited. Therefore, pay level should be increased, and a system that guarantees compensation based on the current inflation level should be established. In addition, there should be an adequate difference in benefits between the people who serve at sea and those who serve shore duty, e.g., sea pay.

7. Occasional mistakes are a part of life and should not be considered fatal as long as the same mistakes are not repeated. Seniors should engage in supportive leadership, which enhances the petty officers' initiative at work while preventing discouragement.

8. Fear or negative discipline should be used only in cases where all other methods of positive discipline have failed. Punishment should be used only after considering its possible consequences for both the individual and the unit. It should not be forgotten that, used excessively, punishment eventually loses its power to discipline

the people. Additionally, petty officers should be made to feel that it is the system, and not the individual, administering the punishment when it is exercised.

9. Both the Turkish and U.S. Navies need to work toward increasing the availability of military housing for their personnel.

10. Geographic assignments for married petty officers should be minimized as much as possible.

11. Petty officers should be given the maximum job responsibility they can bear according to their capabilities.

12. Senior officers should try to reduce stress levels in order to maximize the performance of subordinates on board ship. Some methods to reduce stress include social activities within or outside the ship, supportive leadership, reducing communication barriers against subordinates, sportive activities, and emphasizing teamwork by including poor and good performers on the same team.

In addition to the recommendations provided above, the following recommendations can be made for the Turkish Navy:

1. The Turkish Navy should offer non-monetary rewards at all unit levels to recognize superior performers among petty officers. Such rewards may include letters of appreciation, badges, and medals. However, it is important that performance evaluations be accurate; the study indicated that rewards given to petty officers who do not deserve them may demotivate and discourage others. One of the most effective and simplest forms of reward and recognition is verbal praise, which can motivate petty officers in many situations. The officers can use these verbal compliments in a balanced manner so that they do not lose their power to motivate.

2. The Turkish Navy needs to place advertisements on television, radio, etc., just as the U.S. Navy does, to increase the probability of recruiting quality people by providing recruiters with more options and flexibility.

3. The length of compulsory duty in the Turkish Navy should be shortened, and petty officers should be able choose to stay in or leave the Navy by considering the costs and consequences.

4. The Turkish Navy should execute a Navy-wide "quality of life" improvement program. Most especially, family-oriented services should be improved because frequent deployments lead to considerable and inevitable family separation.

5. The Turkish Navy should increase the level of career and promotion opportunities for its petty officers in order to increase competition that may lead to high performance. The number of petty officers who are promoted to officer each year should be increased, while the age of qualification should be decreased. The petty officers who are qualified to be officers should also be utilized in combat roles (e.g., in frigates) as well as on shore duty.

7. The Turkish Navy should establish a special unit to deal with the problems of petty officers on ships. This unit should administer frequent questionnaires, similar to the one used in this research, to the petty officers and should report problems and recommendations to the Turkish Navy Personnel Department so that it can take necessary actions. This unit can also track the areas that are improved and the areas that need to be improved over time. The objective of this unit should be continuous and immediate improvement to the areas determined as problematic.

D. AREAS OF FURTHER RESEARCH

This study was exploratory and provided insights for further, more specific and detailed, research. Similar research that focuses on one specific factor, such as leadership, work environment, or rewards, can be conducted for petty officers in the Turkish or U.S. Navy to determine more specific actions to increase the motivation of petty officers.

Similar research might be done on officers in the Turkish or U.S. Navy. In addition, a detailed study of retention factors for officers or petty officers in the Turkish Navy could be valuable to explore.

APPENDIX-A

PETTY OFFICER MOTIVATION/JOB SATISFACTION SURVEY

The enclosed survey is designed to obtain opinions from officers about motivation and job satisfaction of petty officers in the U.S./Turkish Navy ships. The survey is part of a graduate thesis project at the Naval Postgraduate School, Monterey, California. I encourage you to participate and complete the questionnaire candidly since the validity of the results will depend upon your honest participation. The responses will be analyzed to highlight particular areas of concern, and provide recommendations for improvement.

These questionnaires are completely anonymous and confidential. Please complete and turn in the questionnaire to my mailbox (2567) by 5 April.

Thank you for taking the time to answer these questions.

GENERAL INSTRUCTIONS

1. Use pen or pencil.
2. **YOU ARE TO INDICATE HOW YOU THINK THE PETTY OFFICERS WILL RATE EACH OF THE STATEMENTS – NOT YOUR AGREEMENT OR DISAGREEMENT AS AN OFFICER TO EACH OF THE STATEMENTS.**
3. Use the information provided below to answer the questions 1-46 (Section I).
Read each item carefully. Then rate how much you think the petty officers will agree or disagree with each statement by circling the corresponding number, using the seven-point scale provided right hand side of each question. Meanings of the numbers are as follows;

1= "Strongly disagree" through 7= "Strongly agree."

Example:

Petty officers think the weather in Saudi Arabia is hot during the summer. 1 2 3 4 5 6 **7**

(Since the weather is very hot in Saudi Arabia in the summer, you might strongly agree to the sentence above that indicates petty officers would strongly agree.)

SECTION I

Read each item carefully. Then rate how much you think the petty officers will agree or disagree with each statement – not your agreement or disagreement as an officer. Circle the corresponding numbers, using the seven-point scale provided right hand side of the questions.

How much do you think;	Strongly Disagree	Strongly Agree
1. Petty officers feel free to choose how their work gets done.	1 2 3 4 5 6 7	
2. Petty officers are allowed to make decisions concerning their job.	1 2 3 4 5 6 7	
3. Petty officers set their own task priorities on the ship.	1 2 3 4 5 6 7	
4. Petty officers think that they are competent at their job.	1 2 3 4 5 6 7	
5. Petty officers feel that they have received the training they need to do a job good.	1 2 3 4 5 6 7	
6. Petty officers feel that the work they are doing is important.	1 2 3 4 5 6 7	
7. Petty officers feel that they are showing progress in their jobs by the time.	1 2 3 4 5 6 7	
8. Petty officers are learning useful new things in their jobs.	1 2 3 4 5 6 7	
9. Petty officers are generally satisfied with the kind of work they do.	1 2 3 4 5 6 7	
10. The public respects a petty officer's job.	1 2 3 4 5 6 7	
11. Petty officers feel personal satisfaction when they do a job well.	1 2 3 4 5 6 7	
12. Petty officers are satisfied with their pay level.	1 2 3 4 5 6 7	
13. Petty officers are satisfied with the amount of sea pay.	1 2 3 4 5 6 7	
14. Petty officers intend to stay in the navy until reaching retirement.	1 2 3 4 5 6 7	
15. If the petty officers had the opportunity to retire right now, they would prefer to do that rather than to go on working.	1 2 3 4 5 6 7	
16. Petty officers feel that the navy's goals are also their goals.	1 2 3 4 5 6 7	
17. Petty officers feel that there is too much stress on the ship.	1 2 3 4 5 6 7	
18. Petty officers are satisfied with the amount of their job security.	1 2 3 4 5 6 7	
19. Petty officers feel that effective training occurs during exercises.	1 2 3 4 5 6 7	
20. Petty officers are satisfied with the availability of military housing.	1 2 3 4 5 6 7	
21. Petty officers are satisfied with the level of promotion opportunities.	1 2 3 4 5 6 7	
22. Petty officers feel that innovation and change is primarily ordered by top management.	1 2 3 4 5 6 7	
23. Petty officers are normally given adequate notification prior to their departure for a new duty station.	1 2 3 4 5 6 7	
24. Petty officers feel that there is a sense of urgency about getting things done on the ship.	1 2 3 4 5 6 7	
25. Petty officers are receiving enough recognition for special achievement or extra efforts.	1 2 3 4 5 6 7	
26. Petty officers are rewarded based on their performance.	1 2 3 4 5 6 7	
27. Petty officers feel that there is too much uncertainties in their job, so they can't plan their personal works.	1 2 3 4 5 6 7	
28. Petty officers think that if they do a good job, they get more intensive work than the other petty officers.	1 2 3 4 5 6 7	
29. Petty officers feel that people seem to be avoiding to take responsibility for the challenging jobs on the ship.	1 2 3 4 5 6 7	

	Strongly Disagree							Strongly Agree
	1	2	3	4	5	6	7	
30. Petty officers think that people usually refer problems to their superiors instead of solving them.	1	2	3	4	5	6	7	
31. Petty officers feel that if there is a conflict among people, seniors force their points of view on the ship.	1	2	3	4	5	6	7	
32. Petty officers are sometimes given duties that they have no knowledge about them.	1	2	3	4	5	6	7	
33. Petty officers feel that their seniors listen to and value their opinions.	1	2	3	4	5	6	7	
34. Petty officers think that their seniors provide adequate and timely feedback about their performance.	1	2	3	4	5	6	7	
35. Petty officers are receiving adequate support from their seniors to do their job well.	1	2	3	4	5	6	7	
36. Petty officers feel that their seniors assign work equitably.	1	2	3	4	5	6	7	
37. Petty officers feel that their seniors are concerned about their skill improvement.	1	2	3	4	5	6	7	
38. Petty officers feel that their seniors treat them respectfully.	1	2	3	4	5	6	7	
39. Petty officers feel that their seniors clearly explain the job that they have to accomplish.	1	2	3	4	5	6	7	
40. Petty officers feel that their units provide them all the necessary information to do their job effectively.	1	2	3	4	5	6	7	
41. Petty officers have good communication with their subordinates.	1	2	3	4	5	6	7	
42. Petty officers think that their jobs are challenging.	1	2	3	4	5	6	7	
43. Petty officers prefer geographic assignment rather than staying in one place.	1	2	3	4	5	6	7	
44. Family separation is a petty officer's big concern.	1	2	3	4	5	6	7	
45. Petty officers believe that the best persons are assigned to the best jobs in the navy.	1	2	3	4	5	6	7	
46. Petty officers believe that their performance is fairly evaluated.	1	2	3	4	5	6	7	

SECTION II

47. The following is a list of factors that may affect a petty officer's motivation in a positive way. Please select the top five motivation factors based on your experience, by placing "X" to the provided spaces.

- | | |
|--|---|
| <input type="checkbox"/> Pay increase | <input type="checkbox"/> Training opportunities |
| <input type="checkbox"/> Internal rewards within the ship | <input type="checkbox"/> Taking more responsibility |
| <input type="checkbox"/> Recognition for superior work | <input type="checkbox"/> Teamwork within the ship |
| <input type="checkbox"/> Respect from seniors | <input type="checkbox"/> Progress that he makes by the time |
| <input type="checkbox"/> Sail to foreign countries | <input type="checkbox"/> Sense of accomplishment |
| <input type="checkbox"/> Port visits within the country | <input type="checkbox"/> Increasing sea pay |
| <input type="checkbox"/> Food quality | <input type="checkbox"/> Good communication with seniors |
| <input type="checkbox"/> More autonomy in doing job | <input type="checkbox"/> Inspections |
| <input type="checkbox"/> Meaningful work | <input type="checkbox"/> Good retirement/medical plan |
| <input type="checkbox"/> Increasing career/promotion opportunities | |
| <input type="checkbox"/> Others, please specify _____ | |

48. The following is a list of factors that may affect a petty officer's motivation in a negative way. Please select the top five demotivators based on your experience.

- Low pay level
- Uncertainty of deployments/missions
- Lack of autonomy in performing job
- No recognition for superior work
- Low food quality
- Lack of support from seniors
- Too much stress
- Poor retirement/medical plan
- Living places and conditions at sea
- Inadequate career/promotion opportunities
- Unfair rewards given to people who don't deserve
- Additional duties (secondary duties that are not specifically a petty officer's duty)
- Others, please specify _____
- Frequency of deployments
- Unfairly distributed workload
- Not enough responsibility
- Lack of training
- Inadequate communication in the ship
- Disrespectful treatment by seniors
- Too much/inequitable punishment
- Lack of feedback on his performance
- Housing unavailability

49. In your opinion, what are some of the reasons that play important role in a petty officer's quitting (leaving the navy) decision? Please select five important factors from the list below.

- Low pay level
- Too many regulations
- Medical reasons (incapability)
- Too much unfair treatment
- Long compulsory duty
- Dislike family separation
- Intention to live in some place permanently
- Other family reasons (education of child, work of wife, etc.)
- Attractive job opportunities outside the navy
- Others, please specify _____
- Not being treated with respect
- Lack of freedom in his job
- Lack of career/promotion opportunities
- Dislike sea duty
- Not safe working conditions
- Dislike the environment he works in

50. Other comments (use space provided below):

APPENDIX-B

	TABLE OF MEANS BY QUESTION (TURKISH NAVY)	MEAN VALUES
1	Petty officers feel free to choose how their work gets done.	3.34
2	Petty officers are allowed to make decisions concerning their job.	3.17
3	Petty officers set their own task priorities on the ship.	3.37
4	Petty officers think that they are competent at their job.	5.83
5	Petty officers feel that they have received the training they need to do a job good.	4.97
6	Petty officers feel that the work they are doing is important.	5.29
7	Petty officers feel that they are showing progress in their jobs by the time.	4.94
8	Petty officers are learning useful new things in their jobs.	4.63
9	Petty officers are generally satisfied with the kind of work they do.	4.37
10	The public respects a petty officer's job.	4.46
11	Petty officers feel personal satisfaction when they do a job well.	5.49
12	Petty officers are satisfied with their pay level.	2.43
13	Petty officers are satisfied with the amount of sea pay.	2.14
14	Petty officers intend to stay in the navy until reaching retirement.	4.80
15	If the petty officers had the opportunity to retire right now, they would prefer to do that rather than to go on working.	4.34
16	Petty officers feel that the navy's goals are also their goals.	3.77
17	Petty officers feel that there is too much stress on the ship.	4.89
18	Petty officers are satisfied with the amount of their job security.	4.93
19	Petty officers feel that effective training occurs during exercises.	3.91
20	Petty officers are satisfied with the availability of military housing.	2.91
21	Petty officers are satisfied with the level of promotion opportunities.	2.14
22	Petty officers feel that innovation and change is primarily ordered by top management.	5.11
23	Petty officers are normally given adequate notification prior to their departure for a new duty station.	4.26
24	Petty officers feel that there is a sense of urgency about getting things done on the ship.	4.97
25	Petty officers are receiving enough recognition for special achievement or extra efforts.	3.74
26	Petty officers are rewarded based on their performance.	4.06
27	Petty officers feel that there is too much uncertainties in their job, so they can't plan their personal works.	5.03
28	Petty officers think that if they do a good job, they get more intensive work than the other petty officers.	5.54
29	Petty officers feel that people seem to be avoiding taking responsibility for the challenging jobs on the ship.	4.75
30	Petty officers think that people usually refer problems to their superiors instead of solving them.	5.14

31	Petty officers feel that if there is a conflict among people, seniors force their points of view on the ship.	5.37
32	Petty officers are sometimes given duties that they have no knowledge about them.	4.60
33	Petty officers feel that their seniors listen to and value their opinions.	4.29
34	Petty officers think that their seniors provide adequate and timely feedback about their performance.	3.69
35	Petty officers are receiving adequate support from their seniors to do their job well.	4.34
36	Petty officers feel that their seniors assign work equitably.	3.43
37	Petty officers feel that their seniors are concerned about their skill improvement.	3.71
38	Petty officers feel that their seniors treat them respectfully.	4.06
39	Petty officers feel that their seniors clearly explain the job that they have to accomplish.	4.69
40	Petty officers feel that their units provide them all the necessary information to do their job effectively.	3.97
41	Petty officers have good communication with their subordinates.	5.49
42	Petty officers think that their jobs are challenging.	4.94
43	Petty officers prefer geographic assignment rather than staying in one place.	2.69
44	Family separation is a petty officer's big concern.	6.26
45	Petty officers believe that the best persons are assigned to the best jobs in the navy.	3.91
46	Petty officers believe that their performance is fairly evaluated.	3.71

APPENDIX-C

TABLE OF MEANS BY QUESTION (UNITED STATES NAVY)		MEAN VALUES
1	Petty officers feel free to choose how their work gets done.	3.20
2	Petty officers are allowed to make decisions concerning their job.	3.46
3	Petty officers set their own task priorities on the ship.	2.56
4	Petty officers think that they are competent at their job.	6.05
5	Petty officers feel that they have received the training they need to do a job good.	5.07
6	Petty officers feel that the work they are doing is important.	5.17
7	Petty officers feel that they are showing progress in their jobs by the time.	4.79
8	Petty officers are learning useful new things in their jobs.	4.73
9	Petty officers are generally satisfied with the kind of work they do.	4.66
10	The public respects a petty officer's job.	3.68
11	Petty officers feel personal satisfaction when they do a job well.	5.90
12	Petty officers are satisfied with their pay level.	2.07
13	Petty officers are satisfied with the amount of sea pay.	1.98
14	Petty officers intend to stay in the navy until reaching retirement.	3.39
15	If the petty officers had the opportunity to retire right now, they would prefer to do that rather than to go on working.	4.68
16	Petty officers feel that the navy's goals are also their goals.	2.95
17	Petty officers feel that there is too much stress on the ship.	5.93
18	Petty officers are satisfied with the amount of their job security.	5.02
19	Petty officers feel that effective training occurs during exercises.	4.07
20	Petty officers are satisfied with the availability of military housing.	2.12
21	Petty officers are satisfied with the level of promotion opportunities.	2.68
22	Petty officers feel that innovation and change is primarily ordered by top management.	5.20
23	Petty officers are normally given adequate notification prior to their departure for a new duty station.	5.32
24	Petty officers feel that there is a sense of urgency about getting things done on the ship.	5.17
25	Petty officers are receiving enough recognition for special achievement or extra efforts.	3.44
26	Petty officers are rewarded based on their performance.	3.80
27	Petty officers feel that there is too much uncertainties in their job, so they can't plan their personal works.	4.85
28	Petty officers think that if they do a good job, they get more intensive work than the other petty officers.	5.61
29	Petty officers feel that people seem to be avoiding taking responsibility for the challenging jobs on the ship.	4.68
30	Petty officers think that people usually refer problems to their superiors instead of solving them.	4.66

31	Petty officers feel that if there is a conflict among people, seniors force their points of view on the ship.	5.29
32	Petty officers are sometimes given duties that they have no knowledge about them.	4.88
33	Petty officers feel that their seniors listen to and value their opinions.	3.68
34	Petty officers think that their seniors provide adequate and timely feedback about their performance.	3.32
35	Petty officers are receiving adequate support from their seniors to do their job well.	3.76
36	Petty officers feel that their seniors assign work equitably.	3.61
37	Petty officers feel that their seniors are concerned about their skill improvement.	3.66
38	Petty officers feel that their seniors treat them respectfully.	3.95
39	Petty officers feel that their seniors clearly explain the job that they have to accomplish.	3.63
40	Petty officers feel that their units provide them all the necessary information to do their job effectively.	3.54
41	Petty officers have good communication with their subordinates.	5.07
42	Petty officers think that their jobs are challenging.	4.83
43	Petty officers prefer geographic assignment rather than staying in one place.	3.27
44	Family separation is a petty officer's big concern.	6.49
45	Petty officers believe that the best persons are assigned to the best jobs in the navy.	3.22
46	Petty officers believe that their performance is fairly evaluated.	3.49

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