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THE IMPACT OF THE PHYSICAL ENVIRONMENT ON THE SATISFACTION OF FOOD SERVICE WORKERS

by

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CHAPTER I

INTRODUCTION

Significance of the Problem

Through the 1990's, America will experience an ever-shrinking labor force. The baby boom generation of the fifties and sixties has become the baby bust generation of the seventies and eighties. This problem is exacerbated by low unemployment levels, high turnover and a society that has moved into a post industrial service-oriented economy. Current unemployment levels are about 5 percent, a 15-year low for the United States (Dusky & Sandroff, 1990). The decade of the 1990's will see the growth of the work force slow to an annual rate of 1 percent (Klein, 1990).

The demographic composition of the work-force is changing. It is becoming increasingly heterogeneous. Two-income families and single-parent households are altering the complexion of the work force. Labor force participation rates by women, minorities, physically or mentally challenged, elderly and immigrant populations will rise significantly. As the labor force shrinks, competition among employers for new employees is increasing and these traditionally ignored groups are being catered to as untapped resources (Linstrum, 1988).

These groups are going to enter a foodservice industry that is rapidly mechanizing. Rising real estate costs,

higher energy prices and a shortage of skilled labor are factors causing industry's development and use of technological solutions. Advances in computer technology, its applications and the creation of labor-saving devices are providing partial answers to the need for labor. Morris Gordon (1988) states, "We are just beginning to tap the benefits that computerization and automation can bring to design. One of the most pressing problems automation addresses is the impending shortage of skilled labor" (p. 87).

Mechanization will also generate a demand for employees that are more knowledgeable and have greater dexterity in the kitchen. The Food Works concept, in Motorola's cafeterias, minimizes the need for employees by creating an environment where one employee can service more than one station (Garvey, 1990). Job enlargement and cross-training will be the inevitable by-products challenging employees.

Advances in foodservice preparation, packaging, transporting, and integrating computers for customer service will be a boon to quality and speed of service. A recent ASQC/Gallup Survey shows that customers are willing to pay a premium for quality. Quality service was perceived to involve politeness, promptness and the satisfaction of customer needs (Hutchens, 1989). Promptness and needs satisfaction are synonyms for speed and instantaneous gratification. Microwaves, fax machines, car phones and

automatic tellers are all tangible proof that the need for immediate satisfaction influences consumer behavior. It is a desire that has drastically affected every segment of society and foodservice is no exception. Speed and quality of service will be major factors within the foodservice industry of the 1990's.

Employers are keenly aware that in order to satisfy the public's demands, their employees must first be satisfied with their work environment (Pollock, 1988). Traditionally mechanization has been used to increase productivity and profit. However, exploration of the effects of the physical environment upon employee satisfaction has largely been ignored. Studies have shown that there is a direct correlation between characteristics of the physical environment and the behavior of people (Oldham & Fried, 1987). So in order to enhance service, employees need to work in a physical environment which they perceive to be "user-friendly."

Job Satisfaction and the Physical Environment

Job satisfaction is no longer the exclusive domain of social science researchers. It is a topic of intense debate among a variety of groups that traditionally have had few areas of common interest such as engineering and business. Job satisfaction and the physical environment have not

always been perceived as related. Time shortage and human needs research are responsible for the evolutionary union of these two concepts.

Investigations as far back as the Hawthorne Studies of the mid-1920's have shown an interest in the effects of the physical environment. More recently, Elton Mayo studied increased productivity by examining it in context of the physical workplace (Reece & Brandt, 1981).

Other studies that have made developmental contributions to this area are the Tavistock Institute's empirical investigation into technology and work organization shortly after World War II (Shimmin, 1974). The late 1950's saw Frederick Herzberg explore job satisfaction and the work environment. In the 1970's Volvo set out to completely redesign their concept of the work environment in an effort to gain the cooperation and partnership of its workers (Gyllenhammar, 1977). Ergonomics emerged from the 1970's as a science whose entire purpose is the design of tools and equipment based on human needs.

The physical elements of the workplace and job satisfaction are rapidly becoming concepts that are inseparably bound together. Recent studies by industry show the heighten concern among workers about their physical environment. At times, as many as 67 percent of workers have responded unfavorably about working conditions (Whitehill, 1976).

Today, the hospitality industry is awakening to the idea that the physical environment is more than a means to escalate productivity. Herman Cain, President of Godfather's Pizza, states "We keep the enthusiasm of managers high by constantly trying to improve the quality of their job. That means giving them the tools they need to work with, having the right equipment in the store" (Festa, 1988, p. 103).

Statement of the Problem

Traditionally the foodservice industry has embraced technological innovations to boost efficiency levels and increase productivity. What they have historically failed to do is look at the physical environment as a means to improve the quality of work life and ultimately job satisfaction.

This neglect has cost the foodservice industry enormously in terms of training, employee turnover and absenteeism. Industry figures show that turnover rates in the foodservice sector may be as high as 300 percent annually (Wagel, 1989).

The problem of high turnover is a critical reality as the result of the shrinking labor pool. A December, 1989, National Restaurant Association Gallup Survey reported increased difficulty in filling jobs and retaining employees.

Other factors closely linked to turnover are absenteeism, tardiness and training. It is estimated that a 5 percent to 8 percent loss in worker hours is the result of worker absenteeism (Weinstein, 1989). Tardiness is such a serious problem that companies have been forced to teach employees the value of punctuality as a lifetime job skill.

Training is yet another facet of the problem. Bringing new people into an organization is an expensive proposition. The cost of replacing an employee is estimated to be $1,000 per person (Anderson, 1989). High turnover rates create a revolving door where any potential dollar savings from increased efficiency through automation and training are lost.

Manifestations of this revolving door syndrome are understaffed work teams, help wanted signs with low response rates and low levels of morale among existing workers. There are many in the foodservice industry who feel that absenteeism and tardiness have to be tolerated and that the enormously high levels of turnover are inevitable. Acceptance of this situation will only cause it to worsen. The foodservice industry is just now faced with the beginnings of a shrinking labor pool. Changing demographic patterns will alter recruitment and employee retention techniques well into the future.

Job satisfaction and the physical environment are not a panacea for the multi-faceted problem that the foodservice

industry faces, but it is one area that merits investigation. This study attempted to do look at institutional foodservice workers feelings about their physical environment in light of demographic characteristics. The data collected is descriptive as well as inferential in character and was assessed by use of means, standard deviations, frequencies univariate analysis and chi-square.

Definition of Terms

For the purpose of this study the following operational definitions will be used:

Scientific Management--is a scientific theory-based time and motion studies that emphasizes the cooperation of management and labor for the purpose of the common good or profit.

Hawthorne Effect--is a term coined in reference to the productivity studies conducted at the Hawthorne plant of the Western Electric Company. It was found that the mere presence of researchers affected the behavior of workers.

Informal Organization--is the network of relationships created as the result of the social interaction of workers on the job.

Sociotechnical Systems Theory--emphasizes fitting together the social and technical systems in organizations to allow for participative management.

Bureaucratic Management Theory--was proposed by Max Weber. He stated that in order to maximize efficiency in an organization ultimate authority had to be vested in one person. Military organization is an example Weber's management beliefs.

Job Enrichment--providing opportunities for the employee's psychological growth within the job usually as a result increased autonomy and freedom from control in the workplace.

Job Satisfaction--the specific components of the job that are gratifying or irritating to employees.

Research Questions

The research questions selected for this study were:

1. Is there a difference between selected demographic characteristics of respondents and their satisfaction with the physical environment of the workplace?

2. Are there common demographic characteristics among respondents who report a high degree of satisfaction with the physical environment?

3. Are there specific physical attributes which are consistently identified as sources of high or low satisfaction?

Assumptions

The following assumptions provided a basis for planning and conducting this study:

1. Job satisfaction could be evaluated through scales which coincide with the concepts listed on the survey.

2. Participants comprehend job satisfaction and could convey their feelings through self-administered questionnaires.

3. Individuals factually related background data.

4. Respondents reliably assessed their outlook toward the physical characteristics of their work environment.

Scope and Limitations

As the survey was physically administered by the investigator there were two results. First, the participation rate was considerably higher than if the survey had been mailed. Second, there was uniformity in the administration of instruction for all the participants.

The respondents in the survey were employees of institutional foodservice who voluntarily agreed to participate in the study. Therefore, participants did not represent a random sample. Being a self-selected group may mean that it may not be representative of all foodservice employees in all the institutions. A self-report instrument is also subject to personal bias. Even though employees were required to read English, there may have been some who

did not fully comprehend the questionnaire. This might be attributed to their level of formal education and ethnic background. Because this study was conducted entirely on institutional foodservice workers who received certain state benefits any generalizations may not be applicable to foodservice operations as a whole.

Organization of the Report

The report of the study is presented in five chapters. Chapter One is an introduction which reviews the significance of the problem, general history, definition of terms, research questions, and the scope and limitations of the study. In Chapter Two a sociological model is presented, which outlines the progression of thought from which the research questions are formulated. Chapter Three describes the research procedures utilized in the study. The fourth chapter offers the results of the study and a brief discussion. The final chapter is devoted to the interpretation of the findings, development of conclusions and implications, and the presentation of recommendations.

CHAPTER II

REVIEW OF LITERATURE

The review of literature is presented from a historical perspective. The evolution of early social scientists is traced looking at efficiency and productivity which led to the emergence of a social awareness that links job satisfaction to the work environment. The contributions of pioneers including Mayo, Maslow, Herzberg and Likert have provided a significant framework.

Man is a creature who is defined most clearly by his work. People and cultures have cited a myriad of reasons why man works, but none the less, work is an intrinsic part of his character. Whether the reasoning for work is physical survival or self-actualization it is something that is carried with him all his life. The evolution of man's work has been a saga of the struggle from a survival mentality to an environment of self-awareness (Work in America, 1973).

Evolution of Management Theory

Early industrialization involved long hours, low wages and difficult conditions for the unskilled. At its zenith the industrialization of America saw its work force as a disposable commodity. Upton Sinclair's book The Jungle (1906) was a scathing indictment of the unbearable working

conditions that existed during the early 1900's. Men, women and children were exposed to 18-hour days in "sweat shops" that were characteristically unventilated, poorly lit, cramped and often dangerous (Unger, 1989).

Productivity was the impetus for the examination of the physical environment by social scientists of the early 20th century. Frederick Taylor's time and motion studies were aimed at increasing industrial efficiency that would result in increased productivity. What became known as the Theory of Scientific Management is now considered anachronistic because of Taylor's failure to properly grasp the human and social component of work. Taylor (1989) saw profit as the force that bound management and labor together. The partnership for profits that he envisioned ignored the elements of power, greed and selfishness. Management was not interested in the partnership with labor, they were interested exclusively in profits. Taylor and management both failed to understand that there is more to work than monetary gain.

Elton Mayo's research, at the Hawthorne Western Electric plant during the 1920's, scrutinized productivity in terms of the physical environment. While looking at the effects of lighting it was discovered that productivity increased even more when the lighting was turned down. What Mayo accidentally uncovered was that all the attention from researchers gave workers a sense of importance that often

produced increased levels of productivity. Workers for the first time received genuine feedback. Test conditions also allowed employees greater freedom and interaction; as a result, the Hawthorne Studies uncovered the "informal organization" (Argyris, 1957, p. 136). The informal organization proved to have a great deal of affect on productivity because it allowed for two-way communication that could circumvent the formal structure. The informal organization was important because it gave the worker an avenue for input.

Mayo's "Hawthorne Effect" forced management to see labor as a intricate combination of needs, values and feelings, a factor scientific management theory overlooked. It laid the foundations for the humanistic approach to employee motivation and supervision through job satisfaction. Serious consideration of Elton Mayo's investigations was not evident until the late 1940's because management paid little real attention to his discovery (Homans, 1989, p. 202).

After World War II, a renewed interest emerged in worker motivation. The Tavistock Institute's studies in England demonstrated the open concept in work organization. Open concepts allowed the emergence of a sociotechnical system that focused on interweaving human needs and technology into a total work environment. In practice, work groups were reduced in size and given greater independence.

This complex interaction showed that work groups and tasks could be designed in a variety of ways to meet or surpass productivity needs (Likert, 1961, p. 37).

The first group to adapt these sociotechnical principles was Swedish management. Volvo redesigned its work force by adapting the sociotechnical theory in the 1970's. Work groups were offered increased autonomy and flexibility. People were encouraged to take advantage of a spirit of cooperation and partnership on the part of management. Jobs were restructured to allow for cross-training, improved physical environment and two-way communication (Gyllenhammar, 1977). Sociotechnical systems theory is important because it goes beyond simple job satisfaction and introduces the concept of quality of work life through job redesign, communication with feedback and open organizational structures.

Abraham Maslow built on these theories during the early 1950's by an examination of motivation. He analyzed the concepts of why sociotechnical systems worked. This analysis led him to study worker motivation that resulted in the development of a "hierarchy of needs." He identified five levels of need: the physiological, safety and security, social, ego, and self-actualization. The first three levels dealt with protection, and the last two levels involved expression of the individual (Maslow, 1970).

Chris Argyris proposed an organizational structure that was based on matching organizational needs and goals with those of the employee. His organizational structure was in direct conflict with the bureaucratic management theory of Max Weber (Argyris, 1957). Weber, an early twentieth-century social scientist, saw control as the essential element in productivity. He proposed that authority should rest in a hierarchical bureaucracy and ultimate control be vested in one person. Argyris built a framework that integrated the needs and goals of management and labor to create the social organization. This social interaction led to the informal organization, first uncovered in the Hawthorne Studies, that often decreases conflict, frustration and failure. It allows the worker to feel as though he is having an impact on the formal organization or network (Argyris, 1957).

Management decisions have attempted to predict and control human behavior. Douglas McGregor, a contemporary of Argyris, offered two theories of management style, Theory X and Theory Y. Theory X proposed that management and labor largely operate in an environment of mutual distrust. The result was a bureaucratic organization with rigid regulations and processes. Theory Y assumed that the organization operated in a positive environment where it was possible to integrate the needs and goals of employees with that of the organization. In Theory Y, McGregor saw the

opportunity for self actualization of the worker as a means for management to ensure its survival (McGregor, 1985).

Rensis Likert (1961), in his book New Patterns of Management, looked at the outcomes of Argyris integration of needs and goals with McGregor's positive environment. Likert viewed thriving businesses as social organisms with a structure fashioned to promote the technical proficiency of the employee. He felt a living business organization promoted a healthy environment that would motivate workers.

Frederick Herzberg, one of Maslow's disciples, re-examined motivation as it applied to the organizational structures created by scientists like Argyris, McGregor, and Likert. Herzberg was looking for the key motivators that fit into those organizational structures and Maslow's hierarchy of needs. Herzberg saw job dissatisfaction and job satisfaction as totally separate concepts that were influenced by different factors which he called hygiene factors and motivators. Hygiene factors, such as working conditions and security, were secondary because they failed to appeal to the psychological growth man desires. He concluded that more favorable results could be achieved through concentration on motivators. Achievement, recognition, the work itself, responsibility, advancement and growth are the key components that create job enrichment. Figure 1 reveals the effect hygiene factors and motivators had on job attitudes (Herzberg, 1987).

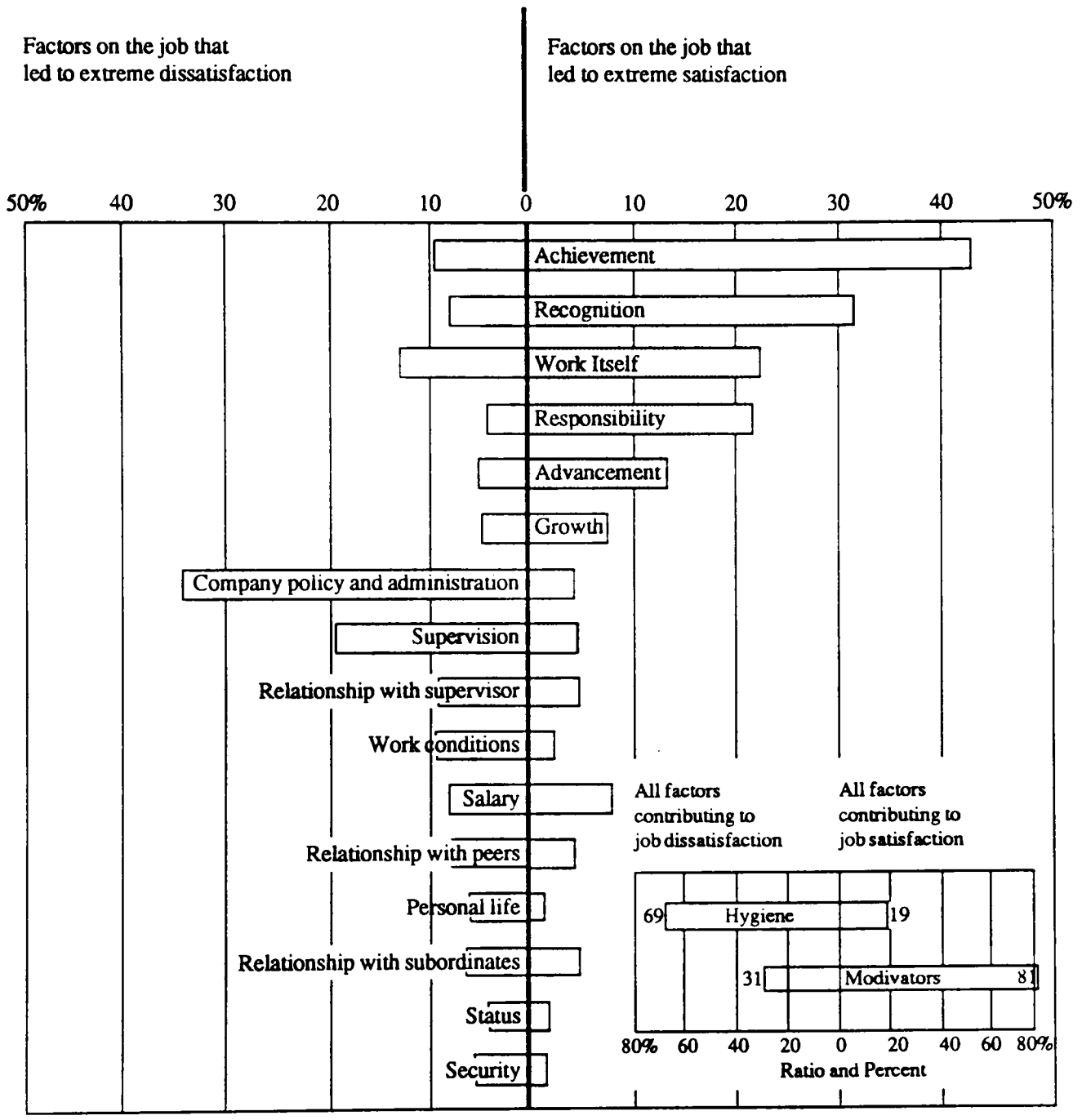

Figure 1. Factors affecting job attitudes as reported in 12 investigations that looked at job satisfaction and dissatisfaction (Herzberg, 1987).

Social scientists, of the early twentieth-century, built upon one another's work. Taylor began by exploring productivity and efficiency. Mayo accidentally uncovered the attitudinal effects of work. The Tavistock Institute's studies first revealed the applications of the interplay between attitudinal effects and productivity. These led to the sociotechnical systems theory that began to tie the social and technical aspects of work together. Abraham Maslow carried the idea a step further by looking at motivation as it applied to the sociotechnical environment. What he found was a hierarchy of worker needs. Likert, McGregor, and Argyris fit the sociotechnical environment and hierarchy of needs into organizational structures. The concepts of open organizational theory worked, because they appealed to the highest level of needs, self-actualization and self-esteem. Herzberg brought these ideas together by identifying key motivators and their interplay with Maslow's hierarchy of needs.

Technology and Foodservice

Technology and automation have played major roles in foodservice attempts to control costs and increase profits. Rising labor, real estate and energy costs have brought about continuing advances in equipment development and kitchen design.

Ray Kroc led a drive by McDonalds to utilize technology to ensure quality and consistency of product and speed of service with fewer workers. McDonalds Corporation funds research and development programs which ensure franchisees the availability of state of the art equipment. This has given the corporation a position of technological leadership in the fast-food industry (Haywood, 1990).

Pizza Hut has aggressively entered the luncheon market due to the development of the continuous broiling oven. The company was successfully able to match technology and customer needs. Sales dramatically increased as the result of having ovens that could handle customer demands for a speedy lunch (Haywood, 1990).

Equipment costs are currently at $115 per square foot of kitchen space (Equipment and Supplies, 1990). The industry's response has been the development of equipment that has multiple capabilities and reduced space needs. The air impingement oven directs super-heated air over food passing on a conveyor belt. It is extremely popular with restauranteurs because it saves space and labor. The combination steamer/oven is an example of equipment that manufacturers are providing which performs more than one function (Equipment and Supplies).

Kitchen design is a topic of acute interest among restauranteurs. Planning is crucial in the design and layout of a kitchen to maximize efficiency. An example is

the Rainbow Room, in New York City, which recently completed a million dollar kitchen renovation. Changes included redesigning the work flow and replacement of most equipment. The entire facility was streamlined and simplified to increase efficiency (Frydman, 1989).

Along with these examples of changes there is an increased sophistication of technology, such as point-of-sale registers, wireless headphones, networking, and expert systems. These combined factors will require more skilled employees (Durocher & Niman, 1990). Automation technologies will require increasing training costs which are already over $1100 per employee by some estimates (Lydecker, 1988).

All of these factors make retention of employees a vital concern in foodservice. It is a means of controlling training costs, turnover, and the resulting disruption in productivity. Scrutinization and development of Quality of Work Life programs by foodservice employers is the key to employee retention.

Quality of Work Life

Modern application of management theories has produced what has become known as Quality of Work Life (QWL). Edward Lawler assimilated the components of QWL into the participatory management climates of earlier theorists by examining three levels of needs that produce QWL. His model

of Needs and QWL is shown in Figure 2. It is a system of organizational approaches that were designed to increase employee well-being within the confines of organizational objectives (Lawler, 1982).

American management largely ignored social science theory until the mid-1970's. This was primarily due to the world-wide reverence for the successes achieved under America's bureaucratic management system. American productivity began to lose its preeminence in the late 1960's. As E.V. Bowden (1986) points out in his text Economics: The Science of Common Sense:

> In the ten years starting with 1968 our productivity grew at only about 1.5 percent per year ... Productivity per worker in West Germany was growing at an annual rate of 6.2 percent. In Japan it was growing at 7.9 percent. (p. 7)

This dramatic drop in productivity was a definite signal that something was amiss in the America system. Management began to reexamine its bureaucratic style within the current marketplace. Treatment of labor as a disposable commodity was no longer realistic in the current work environment. American management was beset by a host of challenges and problems related to labor. These problems included:

1. A shift in the economy from manufacturing to a service and knowledge-based economy (Sloane & Witney, 1988, p. 6-7).
2. America's increasing level of education (Powers, 1988).

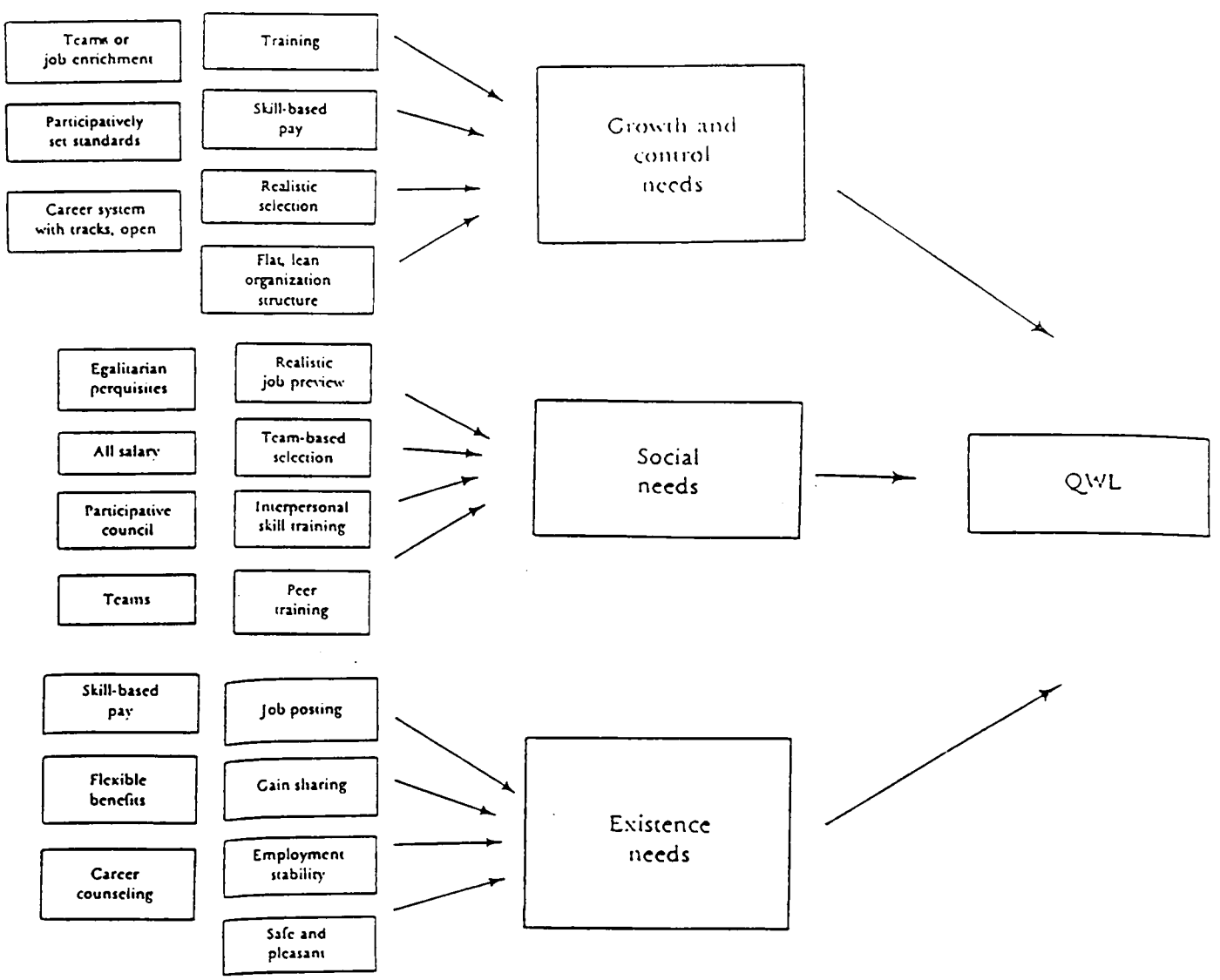

Figure 2. Robert Lawler's Needs and Quality of Work Life Model (Lawler, 1982).

3. Changing demographics (National Restaurant Association, 1986).

4. The continually shrinking labor force (National Restaurant Association, 1989).

American managerial style began to unravel under the weight of its own problems. The federal government commissioned the writing of a major report, that was eventually published as the book, Work in America (1973), which graphically documented the American quandary. For the first time the American public was aware of the failures of the bureaucratic system (Lawler, 1986, p. 8).

Labor in America became so expensive that it could not compete in the world labor market. The U.S. steel industry's decline is a prime example of a manufacturing industry that was eclipsed by cheaper foreign imports (Sloane & Witney, 1988). A myriad of industries were affected by the discrepancy in wage rates between American industry and its foreign competitors. These included cars, electronics, rubber, glass and meat-packing industries. America's inability to compete industrially moved it toward a service economy.

The American work force is one of the most highly educated in the world (Mohrman & Lawler, 1984). What this has done is to create employees who no longer blindly obey orders based solely on the authority of their superiors. More educated workers demand more input, ask more questions

and want the commitment of the company without necessarily reciprocating in kind. All these characteristics are an anathema to the traditional bureaucratic style of management.

Rapidly changing demographics have placed larger numbers of handicapped persons, women, elderly people and third-world immigrants into the worker pool. This heterogeneous mix has created problems in supervision and communication (Mohrman & Lawler, 1984). Studies indicate all these groups have special needs that must be addressed in order to make them an effective part of the work force. The handicapped must overcome management misconceptions of their abilities (Scarpati & Lattuca, 1989). Women face child care dilemmas while pursuing active careers (Wayne & Burud, 1986). The retired and elderly are often stereotyped and ignored (Berger, Ferguson, & Woods, 1989). Historically immigrants must overcome societal prejudice and cultural barriers (Unger, 1989).

Predictions about the shrinking labor force also point to the increasing disparity in the demand for skilled labor and in the available workforce. As business relies more on automated technology to negate worker shortages, they widen the gap between skilled and unskilled labor. New technologies and their application will require a more sophisticated workforce (McDermott, 1990). The National Planning Association (NPA) projects that the service sector

will grow at a rate of over 1.3 percent per year while the labor market will grow at 1.2 percent or less (Withiam, 1989).

These changes in the business environment caused the business community to abandon bureaucratic theory as an effective management tool. American managers began a quest for solutions that eventually lead to participatory management techniques. The embodiment of this new style of management can be found in employer's commitment to QWL.

The new "buzz words" of American management became job enrichment, cross-training, quality circles, consensus management and work design. QWL was a dynamic philosophy that proved right for the time. The implementation required dedication and an ongoing commitment from management and labor to be effective. It has led to a rejuvenation of American business (Miller, 1989).

General Motors' Tarrytown plant's autocratic administration was plagued by high turnover, large-scale absenteeism and skyrocketing operating costs during the early 1970's. It was an environment that needed to be changed. Starting in 1972 and continuing over the next five years, a QWL program was implemented. This proved to be the first time QWL was included in a labor contract. The uniqueness sprang from the fact that management and labor entered into a joint venture for the purpose of

simultaneously achieving organizational goals and the recognition of human needs (Guest, 1982, chap 5).

Tarrytown was a success because it allowed the organization to survive the layoffs during the Organization of Petroleum Exporting Countries (OPEC) oil crisis with minimal union conflict. It resulted in a significant increase in productivity on the assembly line. Grievances fell sharply and overall attitudes improved. This served as an example of a near disaster becoming a model for success (Guest, 1982, chap. 5).

A facet of the QWL movement was quality circles (QCs). The adoption of QCs was pioneered by Lockheed Missile and Space Company in 1974. QCs are small groups, composed of technicians, supervisors and line employees that review quality standards and offer recommendations to improve product quality. Lockheed was able, through this program, to substantially reduce production costs, while improving quality (Miller, 1989).

Martin Marietta Corporation, Denver Aerospace/Michoud Division changed the plant culture as a result of QCs. They had experienced low morale, excessive overtime and a high rate of requests for transfer. After the implementation of QCs workers were viewed as consultants who took an active role in problem solving. The QCs produced extremely impressive results (Thompson, 1982, Chap. 1).

Job satisfaction is the key to QWL programs. Studies in the hospitality industry confirm that employees are immensely interested in QWL issues. A study conducted at a major hotel, on non-managerial employees, revealed that overall job satisfaction was dependent upon a stable organizational climate. Employees' overall behavior and intentions to quit were found to be a function of the organizational climate (Jackofsky & Slocum, 1987). A similar study of non-managerial employees in a major restaurant chain examined turnover factors as they related to job satisfaction determinants. Researchers found there was a strong link between the two. They recommended greater attention be paid to job satisfaction issues (Tas, Spalding, & Getty 1989).

Today's early attempts at employee job satisfaction demonstrate that benefits are an area on which some foodservice employers are concentrating. "White Castle attributes its relatively low turnover of 100% to a generous array of benefits" (Lydecker, 1988, p. 38). Raymond C. Linstrum (1988) in his article "The Future of Flexible Benefits" indicates flexible benefits are "the best tool available for allowing employers to appeal to a diverse workforce" (p. 50). Commercial foodservice employers are showing an increasing interest in expanding their benefits programs as a retention tool.

These are a few examples of the successes of QWLs. The prosperity of QWLs has been in places where management and labor have worked together. They have focused on achieving programs based on motivating the human need of self-actualization.

Quality of Work Life and the Physical Environment

Studies evaluating QWL's success determined that an area that was being overlooked was the physical environment. QWL achievements have traditionally addressed the motivational side of Herzberg's theory while ignoring the maintenance factors. This preoccupation with high level motivators has left the concerns about more fundamental questions unanswered.

Light, sound, air, heat, humidity, vibration and space are elements of the physical work environment that have been associated with the physiological level of Maslow's hierarchy of needs (Kaplan, 1977). These basic concerns top the agenda of many of today's workers. The full extent can be seen in the results of a 1976 study in the automobile industry. Table 1 demonstrates graphically how important the physical environment is to the workers surveyed. Physical conditions, safety and health concerns topped the list of worker dissatisfaction.

Table 1. Job factors considered unsatisfactory by U.S. auto workers (Whitehill, 1976).

Factor Category	Percent of Dissatisfied Workers
Maintenance Factors	
Good Physical Conditions	67
Safe & Healthy Work Place	49
Convenient Hours of Work	35
Motivation	
Variety	31
Independence	24
Responsibility	19

N = 173

It is clear from the volume of literature that the physical environment is a constantly recurring issue. Ted Pollock (1988), in the article "On the Management Side: Winning Cooperation," lists a pleasant physical environment as one of the things employees want most. An article by May (1979) also demonstrated the link between improving the appearance of the work environment and employee satisfaction.

Management theory and practices have come a long way from the sweat shop mentality of the early 20th century. Sociotechnical systems, QWLs and participatory management techniques have certainly aided in the search for the common ground that joins organizational goals and human needs.

Quality of Work Life and Foodservice

Foodservice is an enterprise that has not kept pace with the evolution in managerial thought. Compared to the lengthy histories of other industries, foodservice has just begun. In 1919, there were only 42,600 restaurants in the United States (Lundberg, 1989). After World War II, frozen packaging and convenience foods provided the incentive for further growth. The car, walk-up service and ample parking space produced the fast-food chains of the 1960's that have become the kings of foodservice in the 1990's. In 1986, there were 140,700 fast-food outlets in the United States (Powers, 1988).

There has been an explosion in foodservice sales from $42.7 billion in 1970 to $185.5 billion in 1986 (West & Wood, 1988). Foodservice has become the largest employer in the retail sector with over 8 million employees (West & Wood). Evidence of the vast economic power of foodservice is shown in Table 2. The evolution of foodservice as major a facet in the service industry was engineered by an adherence to the management blue-print that had been set down by more traditional industries. It was a philosophy that relied on scientific management and bureaucratic style.

E.M. Statler, who established the first full-service popular priced hotel, attempted to consolidate control as his hotel chain grew. He used the first centralized corporate staff in order to standardize his entire operation. It was felt that strict control was necessary to ensure consistency in the quality of service throughout the chain (Powers, 1988).

Stouffer restaurants were founded on the idea in which control of the kitchen was a necessary element in the creation of a restaurant chain. Vernon and Gordon Stouffer studied scientific management principles in college and sought to apply those principles in their restaurants. They wanted to avoid craft-based kitchens that relied on the talents of skilled chefs. Instead workers followed recipes that allowed little room for personal creativity and produced the uniform standardized quality that Stouffers

Table 2. Foodservice sales for 1988 (Lundberg, 1989).

FOODSERVICE STATISTICS		
More than 180 million meals served each day More than 500,000 foodservice establishments Foodservice total sales exceeds $160 billion a year Counting part-timers employees number about 8 million Forty-two percent of the consumer food dollar spent eating out		
Food and Drink Sales to Top $200 Billion, 1988		
	Food & Drink Sales, ($000)	Real Growth Change, %
Group I—Commercial Foodservice		
Restaurants, lunchrooms	$70,574,055	6.7
Limited menu restaurants	60,424,713	8.5
Commercial cafeterias	3,913,752	6.4
Social caterers	1,600,472	7.4
Ice cream stands	1,698,113	7.1
Bars/taverns	9,626,479	4.5
Food contractors	11,549,553	7.2
Lodging places	13,303,031	7.8
Retail host restaurants	8,906,822	12.0
Recreation & sports	2,269,720	5.6
Mobile caterers	746,362	5.9
Vending & non-store retailers	4,718,400	7.1
Total Group I	$189,331,472	7.5
Group II—Institutional Foodservice		
Employee foodservice	$2,113,473	4.6
Elementary & secondary schools	3,294,503	4.0
Colleges & universities	3,421,136	3.1
Transportation	1,183,634	9.3
Hospitals	7,368,453	2.4
Nursing homes	3,415,481	4.4
Clubs & camps	1,838,580	5.5
Community centers	509,691	6.6
Total Group II	$23,144,951	3.9
Group III—Military Foodservice		
Officer & NCO clubs	$691,882	6.3
Military exchange foodservice	357,910	6.6
Total Group III	$1,049,792	6.4
Grand Total	$213,526,215	7.1

sought (Powers, 1988). It is a philosophy similar to the assembly line mentality of Henry Ford.

A leader in the fast-food industry, McDonalds, is a prime example of the application of technological innovation. Their reliance on automation is aimed at minimizing labor and maximizing the control over their product and the consistency. This has limited the human interference in the delivery of fast, high-quality food (Haywood, 1990).

The fantastic growth and success that the foodservice industry enjoyed has been costly. Hospitality has continued to employ the bureaucratic management style. The present philosophy of one-way communication, centralized control and consideration of labor as an endless resource must be corrected. Other industries have demonstrated that this change is a necessary part of business survival.

Foodservice needs to rethink philosophies concerning the labor force because of shifting demographic patterns. Workers are a dwindling resource that can no longer be treated as an expendable commodity. Technology has been the continuous servant of the hospitality industry. Automation has alleviated many of the employment problems of the past. The industry will continue to build upon this relationship in the future. Automation has presented a duality that will reduce the number of workers required, but

will demand a workforce that brings increasing levels of flexibility and knowledge to the workplace.

These circumstances translate into a host of problems and challenges. Foodservice traditionally has accepted high turnover because of management's belief in the endless supply of labor. Escalating training costs have antiquated this type of thinking. Figures reveal that training costs can run as high as ten to 20 times the employees' weekly salary (Tas, Spalding, & Getty, 1989). This puts a priority on retention and cross-training. Changing demographics has introduced more unskilled workers into the labor force at a time when skilled labor is at a premium.

The National Restaurant Association has been monitoring foodservice's labor situation. The labor shortage has become a serious preoccupation in an attempt to focus attention on the problem. Several areas have been addressed as real concerns in Current Issues Reports published by the National Restaurant Association.

The demand for labor will drastically outstrip the supply by the mid-1990's. The National Restaurant Association (1986) estimates the labor shortfall to be 1.1 million workers by 1995. A 1989 survey of restaurant owners recognized the impact of this issue (Table 3). Labor shortages are projected to continue to worsen for American employers as a whole well past the turn of the century.

Table 3. Proportion of restaurant managers whose report statements describe their labor situations. * January-February 1988 and December 1989 (National Restaurant Association, 1989).

	U.S.		East		Midwest		South		West	
	'88	'89	'88	'89	'88	'89	'88	'89	'88	'89
Other employers in area are experiencing labor shortage	42%	45%	56%	45%	43%	48%	36%	38%	33%	49%
We have fewer qualified job applicants	37	43	39	47	39	45	35	39	33	44
We have fewer applicants for jobs paid on an hourly basis	36	34	49	26	38	36	26	32	35	38
Turnover is up	27	32	28	26	30	35	22	32	27	33
We have fewer applicants for salaried jobs	28	30	31	26	27	29	26	35	30	29
Jobs stay vacant longer	22	26	26	30	20	28	22	24	22	24

*Well=4 and 5 on a 5-point scale.

Source: National Restaurant Association Gallup Survey.

The National Restaurant Association surveys point to the change in worker demographics. Changes in the average age of workers were noted with a sharp decline in the teenage workforce. Older workers will take more part-time jobs. Women, currently 57 percent of foodservice workers, will continue to increase in number. There will be a significant increase in the proportion of Blacks, Asians and Hispanics in the labor force (National Restaurant Association, September, 1989). All these groups have special needs industry must meet if the groups are to be viable alternatives to the labor shortage.

The Study

Institutional foodservice is one facet of the hospitality industry that has tended to offer work stability and more benefits to employees (Lundberg, 1989). Table 4 demonstrates the marked difference in benefits between commercial and institutional foodservice. The population selected from institutional foodservice had a benefits package (Appendix A, Part IV) and relative job security. This removed these two variables from the job satisfaction equation and allowed the focus to be centered on another area.

The physical environment was selected for examination to discover if it plays a role in job satisfaction. Physical elements of the workplace are closely associated

Table 4. Fringe benefits among foodservice operations that are commercial and noncommercial (Powers, 1988, p. 154).

	Percentage of Those Offering Benefit	
Fringe Benefit	Commercial	Noncommercial
Pension plan	25%	75%
Medical insurance	65	80
Other insurance	44	46
Living accommodations	5	15
Cash bonus	25	5
Profit sharing	28	9
Stock option	12	4
Company car	38	4

with the physiological level of Maslow's hierarchy of needs. They are also components of Herzberg's hygiene factors that are being re-examined as new motivators (Herzberg, 1987). The study was designed to explore the importance of physical environment to employees and management. Demographics were scrutinized to see if there were differences among groups.

Model of Job Satisfaction and the Physical Environment

Figure 3 is a sociological model developed to exhibit the interaction between the physical environment and job satisfaction and to show potential outcomes. The box at the bottom of the page represents current industry pressures. The existing work force is being squeezed on two sides by a shrinking labor force and shifting demographics. Foodservice has had to increase its reliance on mechanization as a response to the labor shortfall and consumer demands. Automation, scarcity of labor and shifting demographics force employers to consider employee gratification as a retention tool. Failure to respond to these pressures will result in increased personnel costs.

Dealing with these pressures requires looking at the physical environment in a new light. If successfully implemented, improvements in the physical components of work can be a motivator. An enhanced work environment would contribute to a quality of work life situation.

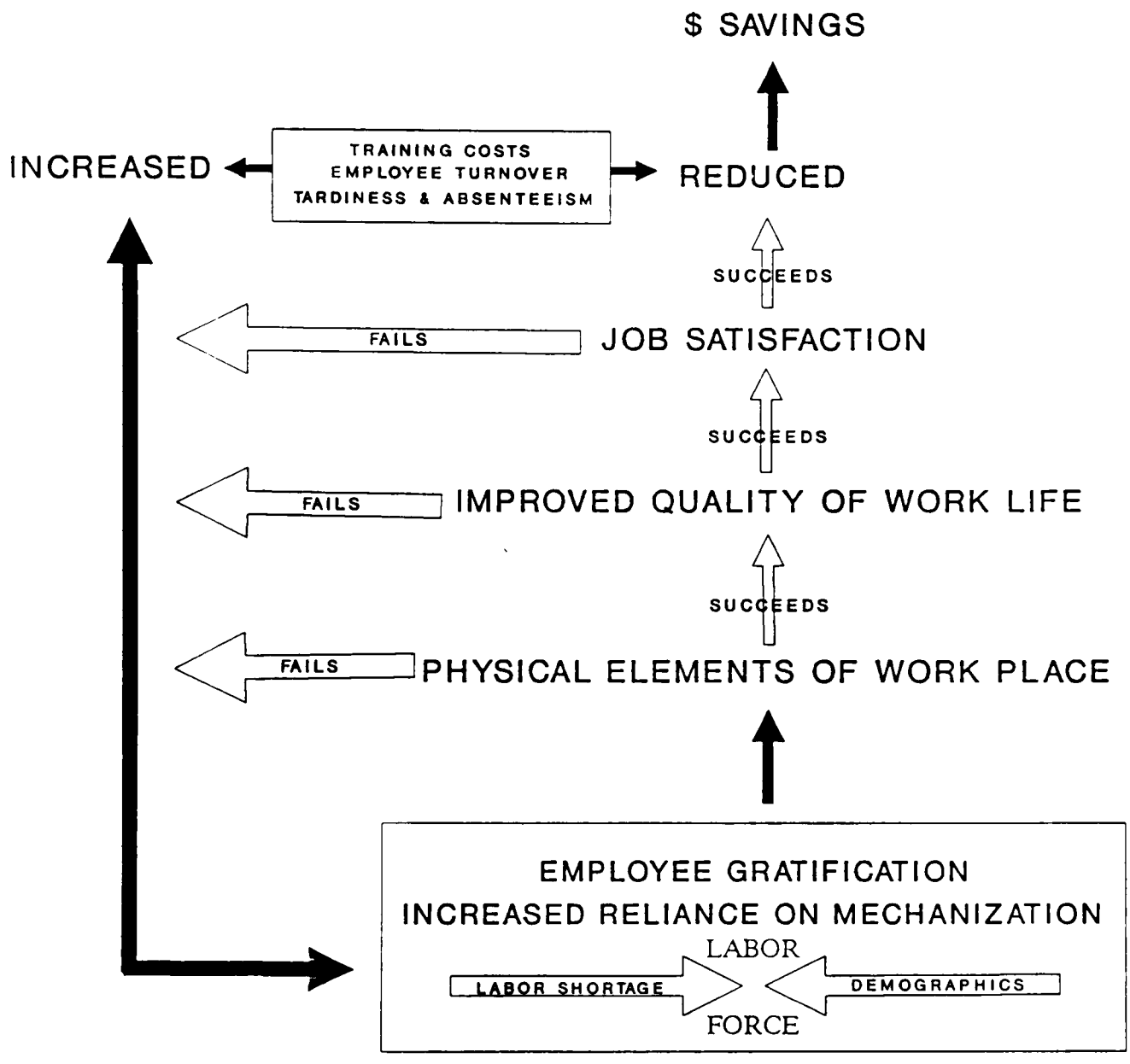

Figure 3. Model of Job Satisfaction and the Physical Environment

If QWL is achieved, increased job satisfaction among employees will usually follow. The final reward for management is the savings produced through a reduction in training costs, decreased employee turnover and lower absenteeism.

CHAPTER III

METHODOLOGY

The focus of this study was to measure aspects of job satisfaction and the physical environment among institutional foodservice workers. The purpose was to provide a better understanding of the importance of the physical environment as a motivation and retention tool. This chapter is divided into five sections: the population and sample, instrumentation, pilot study, data collection and data analysis.

Population and Sample

The population for this study consisted of foodservice employees at state schools and state hospitals under the management of the Texas Department of Mental Health and Mental Retardation (TDMHMR). This group was selected due to its numerical size, diversity of locations, ethnic composition and accessibility. The study was approved by Dennis Jones, Commissioner of TDMHMR.

The sample incorporated the maximum number of supervisory personnel and foodservice workers who would volunteer to participate at each facility visited by the researcher between the hours of 8 a.m. and 5 p.m. This time period was selected to take advantage of overlapping shifts

and it was the only time management personnel were available. This involved several shifts of full-time and part-time workers.

Instrumentation

A review of current literature revealed no existing instrument that met the criteria of this study. As a result, a new questionnaire was constructed. The questionnaire had two sections (Appendix A).

The first section included demographic information and was used to obtain personal background data. Topics in this section were:

- gender
- ethnicity
- age
- marital status
- number of children
- number of persons in the household
- family members contributing to income
- spousal employment status
- family's total income
- level of education
- food preparation experience in high school home economics classes
- size of community
- job title

- years employed by TDMHMR
- years in foodservice outside TDMHMR
- current employment status
- also works another job outside TDMHMR

The second section investigated questions concerning the physical environment. A Likert-type scale was used to measure attitudes of employees with four possible outcomes to each question. Responses included a choice of: never, some of the time, most of the time or all the time. Part A examined at the entire kitchen in relationship to the following physical elements:

- comfortable temperature
- good lighting
- good ventilation
- proper equipment
- background noise
- satisfying surroundings

Part B dealt with individual work areas. The questions involved issues of:

- spacing
- safety and cleanliness
- enjoyment
- feelings towards co-workers
- supervisor feedback

Pilot Study

A pilot study was conducted in order to test for reliability and validity of the instrument and to have a better understanding of the population as a whole. Foodservice workers at the Lubbock State School were the subjects. Fifty-three volunteers answered the questionnaire administered by the investigator. Lubbock State School respondents were not included in the final survey because it was felt that any changes might have contaminated the actual study. Excluding the pilot study was also in accordance with the principles of conservatism in research that suggests when doubt exists an item should be excluded.

A job satisfaction scale (Appendix A) was administered to the pilot study participants. Its purpose was two-fold. First it was designed to check the reliability of an environmental scale developed for this study and, secondly, as a measure of Question 3. The job satisfaction scale was adapted from a previous study (Smith, Kendall, & Hulin, 1969). The parts of the instrument were tested for internal validity using Cronbach's Alpha. Reliability on all sections of the scale were between .77 and .94. Any rating above .70 is generally considered acceptable for reliability.

An environmental scale was developed by the investigator and consisted of the eleven questions found in the Part 2 of the job satisfaction instrument. Reliability

of the environmental scale was checked using Cronbach's alpha and was found to be .88 on the job satisfaction scale. The environmental scale was constructed based on the responses of participants to all eleven questions and it was used as a measure of responses to Questions 1 and 2 of the study.

After analyzing the results of the pilot study, minor changes were made. Additional job titles were added, duplicated income amounts were deleted and instructions were simplified. The pilot study's biggest contribution was that it prepared the investigator for the other site visits.

Data Collection

Data for the study were collected July-September 1989. The survey was administered at the participating sites. There are 13 state schools and eight state hospitals in Texas. One of the state schools was used for the pilot study and another state school chose not to participate. The 19 remaining schools and hospitals served as the data collection points. The state schools were surveyed in Texas were located in: Abilene, Austin, Brenham, Corpus Christi, Denton, Fort Worth, Lufkin, Mexia, Richmond, San Angelo and San Antonio. The State Hospitals surveyed in: Austin, Big Spring, Kerrville, Rusk, San Antonio, Terrell, Vernon and Wichita Falls.

The Chief of Foodservice at each facility was contacted by the investigator and arrangements were made for the study. Appointments were scheduled by proximity for purposes of convenience and economy. The investigator arrived at the facility on the appointed day specified by the Chief of Foodservice. Although times varied, all questionnaires were administered between 8 a.m. and 5 p.m.

Instructions were given verbally by the researcher. By request of TDMHMR, instructions stressed that participation was voluntary. A script outline of instructions was used by the investigator to ensure consistency in the presentations. A copy of this outline is presented in Appendix B. Break times were used for the administration of the questionnaires. When break times were not available respondents were allowed to participate in the survey by exchanging tasks as time permitted. Group size ranged from two to 20. The instructions were repeated for each new group. In appreciation for their participation, all persons were given a pencil, to be used in completing the questionnaire, and a piece of candy. Follow-up procedures were not needed as the questionnaires were collected by the investigator while on the site.

Research Questions

The questions selected for the study were:

1. Is there a difference between selected demographic

characteristics and satisfaction with the physical environment of the work place?

2. Are there common demographic characteristics among people who report a high degree of satisfaction with the physical work environment?

3. Are there specific physical attributes which are consistently identified as sources of high and low satisfaction?

Data Preparation and Analysis

Each questionnaire was assigned a number. Data obtained from the questionnaires were transferred to coding sheets for computer reading and data analysis. The Statistical Package for the Social Sciences (SPSS-X, 1988) was utilized for data analysis and summary. Programs were run at the University Computing Center, Texas Tech University. Frequency counts and percentages were tabulated for the demographic characteristics and physical environment.

For analysis of the research questions, descriptive statistics were used in a causal-comparative analysis. The statistical tools used to answer the thesis questions were analysis of variance (ANOVA) and chi-square.

ANOVA compares the means of two or more groups to see if there is a significant difference between those means. ANOVA was chosen for analysis of Question 1, because of its

ability to handle multiple groups. The ANOVA compared the (independent) demographic variables with the (dependent) variable of job satisfaction as it relates to the environmental scale of the study. The environmental scale was composed of all the questions asked about the physical environment.

Questions 2 and 3 were evaluated based on the chi-square test. Chi-square is a non-parametric test used to compare group frequencies. The test examines the probability of an event happening more frequently in one group than another. Chi-square was chosen because it compares job satisfaction with demographic characteristics, in Question 2, and job satisfaction with physical environmental attributes, in Question 3. Chi-square was able to examine high, medium, and low satisfaction levels of the participants.

CHAPTER IV

RESULTS

This study examined the physical environment of the workplace as it related to job satisfaction. A description of the sample surveyed and an analysis of the data are presented in this chapter. The findings are presented in the following order:

1. Demographic data (Responses based on ethnicity were reported but not tabulated due to their inclusion in a parallel study).

2. Results of the study.

a) Question 1 is a discussion of how each demographic variable relates to satisfaction with the workplace.

b) Question 2 is a closer examination of satisfaction with the physical workplace. Demographic characteristics were examined in terms of high and low job satisfaction as compared to the environmental scale.

c) Question 3 looks at the specific physical attributes of the work place that are identified as sources of high, medium and low job satisfaction.

3. The final section of this chapter is a discussion of the findings and their implications. Significant relationships will are reviewed and evaluated with limitations and a closing summary concluding the chapter.

Characteristics

Of the 640 participants in the survey, 80.5 percent were female. The largest ethnic group (44.8 percent) was white, followed by blacks at 33 percent. Age groups were evenly distributed.

The majority of respondents were married (55.2 percent). When asked about children, 80.1 percent of the respondents stated they had one or more children, but the majority of households had less than less than six persons. Family income came from both the respondent and spouse in 44.5 percent of the cases. Almost one third of the respondents were the sole provider of family income. Over 65 percent of the people in the survey had a total family income of less than $25,000 per year.

Almost three quarters of the people surveyed had graduated from high school and most of the participants had taken at least one home economics class. Only 13.3 percent of the sample reported being employed less than one year at TDMHMR. The majority of respondents had worked in other foodservice places, as well, 87.7 percent were full time employees of TDMHMR. A complete frequency and percentage breakdown of the demographics can be seen in Table 5.

The Study Findings

Investigation of the first two research questions employed an environmental scale to measure job satisfaction

Table 5. Summary of frequencies and percentages of demographic data from the actual study.

Background Variable	Subjects*	
	Frequency	Percent
Sex		
Male	121	18.9
Female	515	80.5
Ethnic Group		
American Indian	7	1.1
Asian	9	1.4
Hispanic	111	17.3
Eastern Indian	3	.5
Black	211	33.0
White	287	44.8
Middle Eastern	6	.9
Age Group		
under 21	25	3.9
21-30	163	25.5
31-40	148	23.1
41-50	132	20.6
51-60	130	20.3
61 and over	36	5.6
Current Marital Status		
Never Married	104	16.2
Married	353	55.2
Separated	20	3.1
Divorced	110	17.2
Widowed	43	6.7
Other	4	.6
Number of Children		
None	188	18.4
1	127	19.8
2	144	22.5
3	93	14.5
4	69	10.8
5	33	5.2
6	24	3.7
7	9	1.4
8	5	.8
9	9	1.4

* N=640

Table 5. (continued)

Background Variable	Subjects*	
	Frequency	Percent
Number of People in Present Household		
None	8	1.2
1	77	12.0
2	153	23.9
3	165	25.8
4	119	18.6
5	59	9.2
6	24	3.7
7	13	2.0
8	5	.8
9	5	.8
People Contributing to the Family's Income		
Only me	206	32.2
Spouse and I	285	44.5
Child or Children and I	36	5.6
Spouse, Child or Children and I	32	5.0
Someone other than Spouse or Children and I	69	10.8
If Married, My Spouse is		
Employed Full Time All of the Time	261	40.8
Employed Full time Most of the Time	26	4.1
Employed Part-Time All of the Time	10	1.6
Employed Part-Time Most of the Time	12	1.9
Employed Very Little or Unemployed	35	5.5
Disabled or Retired	50	7.8
Total Income Per Year		
Less than $5,000	37	5.8
$5,000 - $14,999	236	36.9
$15,000 - $24,999	144	22.5
$25,000 - $34,999	88	13.7
$35,000 - $44,999	42	6.6
$45,000 - $54,999	26	4.1
$55,000 or more	8	1.2

* N=640

Table 5. (continued)

Background Variable	Subjects*	
	Frequency	Percent
Highest Level of Education		
Grades 1 - 8	42	6.6
Grades 9 - 11	115	18.0
High School Graduate or GED	287	44.8
Some Professional Education or Job Training After High School	138	21.6
Bachelor's Degree	28	4.4
Graduate Education Beyond Bachelor's	23	3.6
Took Classes in Junior or Senior Highschool		
A Home Economics Class With Basic Cooking	317	49.5
Home Economics Classes Where I Learned Basic Cooking and Use of Industrial Cooking Equipment	103	16.1
No Home Economics Classes	164	25.6
Size of Community		
Big City of 500,000 or more	81	12.7
City of 50,000 to 499,999	169	26.4
Small City of 25,000 to 49,999	83	13.0
Small City of 10,000 to 24,999	108	16.9
Town of 2,500 to 9,999	73	11.4
Town of less than 2,500 or Rural Area	95	14.8
Job Title		
Foodservice Worker 1	174	27.2
Foodservice Worker 2	212	33.1
Cook 1	23	3.6
Cook 2	31	4.8
Head Cook 1	36	5.6
Head Cook 2	19	3.0
Clerk	21	3.3
Dietetic Technician	4	.6
Dietetic Assistant	1	.2
Assistant Manager	16	2.5
Manager 1	25	3.9
Manager 2	25	3.9
Dietitian 1	13	2.0
Dietitian 2	5	.8
Chief Dietitian	6	.9
Chief of Foodservice	6	.9
Other	16	2.5

* N=640

Table 5. (continued)

Background	Subjects*	
	Frequency	Percent
Employed by TDMHMR for		
Less Than 1 Year	85	13.3
1 to 4 Years	182	28.4
5 to 8 Years	130	20.3
9 to 12 Years	108	16.9
13 to 16 Years	61	9.5
17 to 20 Years	39	6.1
21 Years and Over	22	3.4
Worked in Foodservice at Other Places of Employment for		
Less than 1 Year	186	29.1
1 to 4 Years	150	23.4
5 to 8 Years	80	12.5
9 to 12 Years	60	9.4
13 to 16 Years	40	6.3
17 to 20 Years	22	3.4
21 Years and Over	31	4.8
Employment Status		
Full Time (40 hours)	561	87.7
Between 21 and 39 Hours	10	1.6
Half-time (20 hours)	52	8.1
Less Than 20 Hours	8	1.2
Work at Another Job		
No	505	78.9
Yes (1 to 10 hours per week)	28	4.4
Yes (11 to 20 hours per week)	38	5.9
Yes (21 or more hours per week)	35	5.5

* N=640

as it was affected by the physical environment. (The environmental scale was based on all the responses to the 11 questions in part two of the survey found in Appendix A). A separate job satisfaction scale was adapted from an earlier study for the dual purpose of measuring the reliability of the environmental scale and to measure satisfaction in Question 3. The job satisfaction scale was tested in sections for internal validity using Cronbach's Alpha. Reliability on all sections ranged from .77 to .94 in the pilot study. The environmental scale had a reliability of .88 on the pilot study and again on the actual study. Other statistical data concerning the two scales is listed in Table 6.

Research Question 1 asked if there was a difference in satisfaction with the physical environment based on selected demographic characteristics. Each of the independent demographic variables were tested for significance using analysis of variance. The environmental scale was the measure of the dependent variable, satisfaction.

The analysis of variance revealed three demographic variables to be significant. Number of children, community size and number of years employed by TDMHMR were significant at the .05 level of probability. Table 7 lists the F probability for all the variables tested and the means along with the confidence levels of the means for significant findings. The confidence levels are reported to assist in 1

Table 6. Statistical information for the job satisfaction scale and environmental scale used in the study.

Job Satisfaction Scale

Mean	178.23
Mode	187.00
Standard Deviation	40.05
Median	181.00

Environmental Scale

Mean	29.79
Mode	33.00
Standard Deviation	7.17
Median	31.00

Table 7. Significance levels of demographic characteristics according to the statistical test ANOVA as measured by the environmental scale. (These are the statistics that answer Question 1 of the study).

Independent Variables	Means	F Probability	Confidence Levels of the Means
Gender		.1404	
Employment of Spouse		.6645	
Current Employment		.2487	
Job Level		.1151	
Another Job		.6124	
Age		.8901	
Marital Status		.3090	
Number of Children		.0246*	
0-1	28.8797		28.0010 to 29.7583
2-3	30.2096		29.2994 to 31.1198
3+	30.7692		29.5141 to 32.0243
Number of People		.2904	
People Contributing to Income		.4397	
Total Income		.3521	
Level of Education		.8394	
Home Economics Classes		.1459	
Community Size		.0011*	
Big City	28.6235		27.8485 to 29.3984
Small City	31.1176		30.0867 to 32.1486
Town	30.2654		28.9763 to 31.5545
Number of Years Employed By TDMHMR		.0196*	
< 5 Years	30.6873		29.8758 to 31.4987
5 to 12 Years	29.0216		28.0645 to 29.9788
12 + Years	29.0840		27.6912 to 30.4769
Years in Foodservice		.2506	

* Indicates significance at the level of (p = < 0.05).

interpreting the difference in the means of the variables being measured. The confidence levels report mean ranges within which the population mean would fall. The confidence levels have a 95 percent chance of being correct.

Question 2 examined more closely job satisfaction and the physical environment. Chi-square was used to see if there were common demographic characteristics among people who reported a high degree of satisfaction with the physical environment. Respondents were divided into two groups, high and low satisfaction, based on a median split. Again, the same three variables, number of children, community size and years employed by TDMHMR, at the .05 level, were found to be significant. Table 8 shows the levels of significance for all the variables tested.

Question 3 examined the physical attributes of the workplace that were consistently identified as sources of high, medium or low satisfaction. The job satisfaction scale was used to measure the impact physical attributes of the workplace have upon job satisfaction. It was based on a tri-level split that divided the respondents according to high, medium and low satisfaction. The non-parametric chi-square test was used to test for significance. The following independent variables were examined:

- Temperature
- Lighting
- Ventilation

Table 8. Relationship between demographic characteristics and high or low satisfaction with the physical environment.

Independent Variables	Chi-Square	Significance
Gender		0.1740
Age		0.4720
Marital Status		0.8556
Children	7.08340	0.0290*
Number of People		0.3706
People Contributing to Income		0.8795
Total Income		0.6574
Employment of Spouse		0.7145
Level of Education		0.5515
Home Economics Classes		0.1352
Community Size	14.01852	0.0009*
Job Level	3.78044	0.0519
Number of Years Employed By TDMHMR	8.38706	0.0151*
Years in Foodservice		0.1359
Current Employment		0.4654
Another Job		1.0000

* Indicates significance at the level of ($p = < 0.05$).

- Right equipment
- Good background noise
- Good surroundings
- Large enough area
- Safe and clean
- Place I like
- Good co-workers
- Good supervisor

All the above variables were found to have significance levels of 0.0000. Table 9 lists the chi-square value and the significance level for all the independent variables tested. The table shows the results for high, medium and low satisfaction.

Results of the Study

Questions 1 and 2 found both found the same demographic variables to be significant. Although different tests were performed, number of children, community size and years employed by TDMHMR repeatedly demonstrated a significant effect on satisfaction with the physical environment of the job. The means from the ANOVA test indicated that satisfaction with the work environment increased along with the number of children in the household. This was also supported by the confidence levels of the means. The number of children variable demonstrated an inverse relationship with low satisfaction when the chi-square test was applied.

Table 9. Significance levels of physical attributes in relation to high, medium and low satisfaction in response to Question 3.

Independent Variables	Chi-Square	Significance
Temperature	79.04560	0.0000*
Lighting	108.96603	0.0000*
Ventilation	121.39835	0.0000*
Right Equipment	121.60931	0.0000*
Good Background Noise	158.68571	0.0000*
Good Surroundings	235.20625	0.0000*
Large Enough Area	136.33014	0.0000*
Safe & Clean	215.39114	0.0000*
Place I LIke	217.17565	0.0000*
Good Co-workers	145.12022	0.0000*
Good Supervisor	276.04059	0.0000*

As the number of children in a household increased the percentage of respondents reporting low satisfaction decreased. Figure 4 depicts the relationship.

Community size was a variable found to be significant in both tests. The ANOVA reported marked differences in the means. There was a definite relationship between city size and level of satisfaction. People living in a small city or town reported higher levels of satisfaction with the physical environment than people living in the larger city. Again this tended to be confirmed in the confidence levels. Chi-square revealed much higher levels of satisfaction among people in a small city as compared to a big city. It also showed a trend towards higher satisfaction in people living in towns as compared to small cities. Figure 5 illustrates both of these occurrences.

The variable, years employed by TDMHMR, indicated that people employed less than 5 years were more satisfied with the physical environment than people who had been working there for longer periods of time. It also produced a trend that demonstrated the longer a person worked at TDMHMR the more likely they were to experience a low level of satisfaction. Both tests supported the results that are depicted in Figure 6.

Since all the independent variables in Question 3 were found to be significant they were analyzed to determine whether the reported significance was due to a positive or

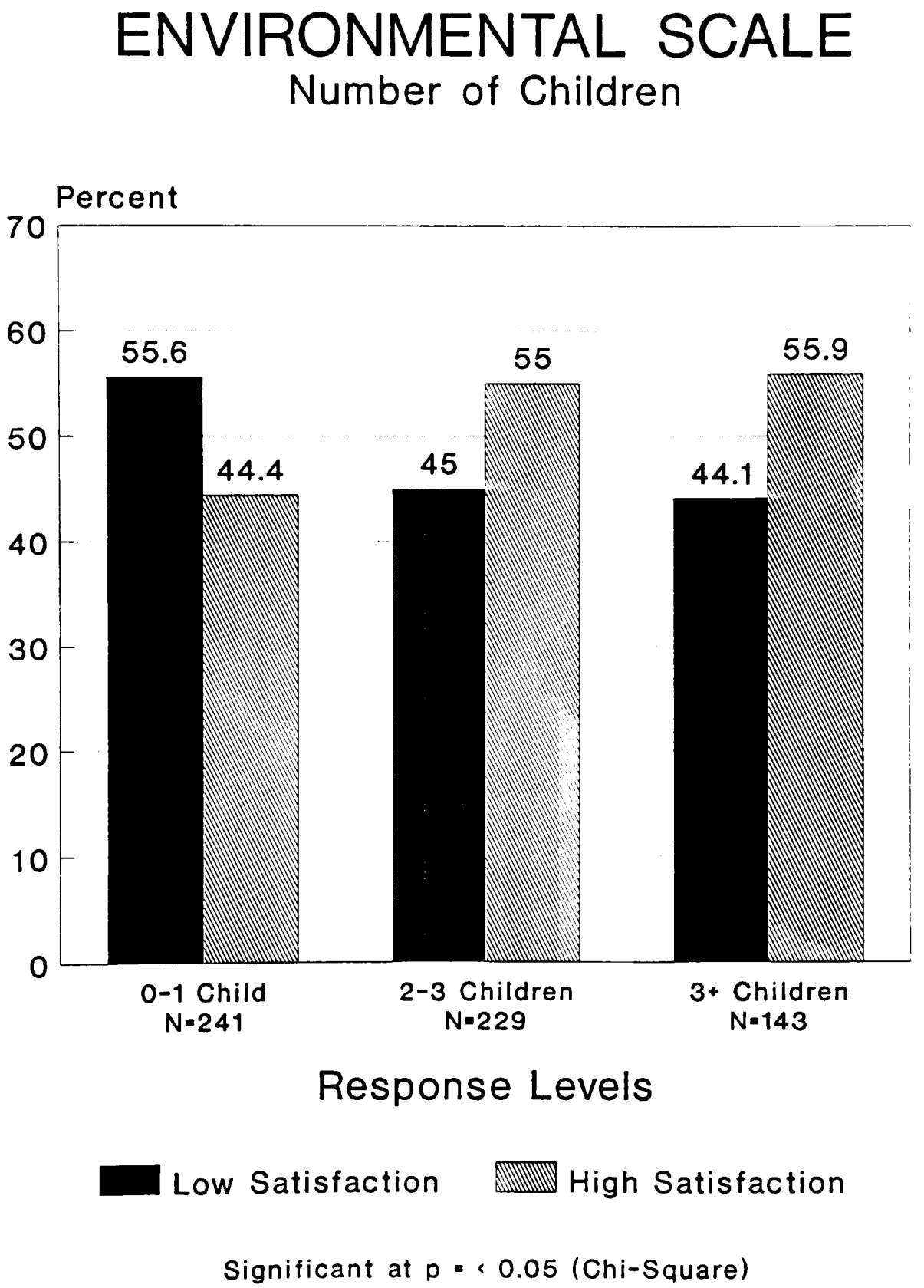

Figure 4. Demographic characteristic (number of children) found significant in Questions 1 and 2 of the study.

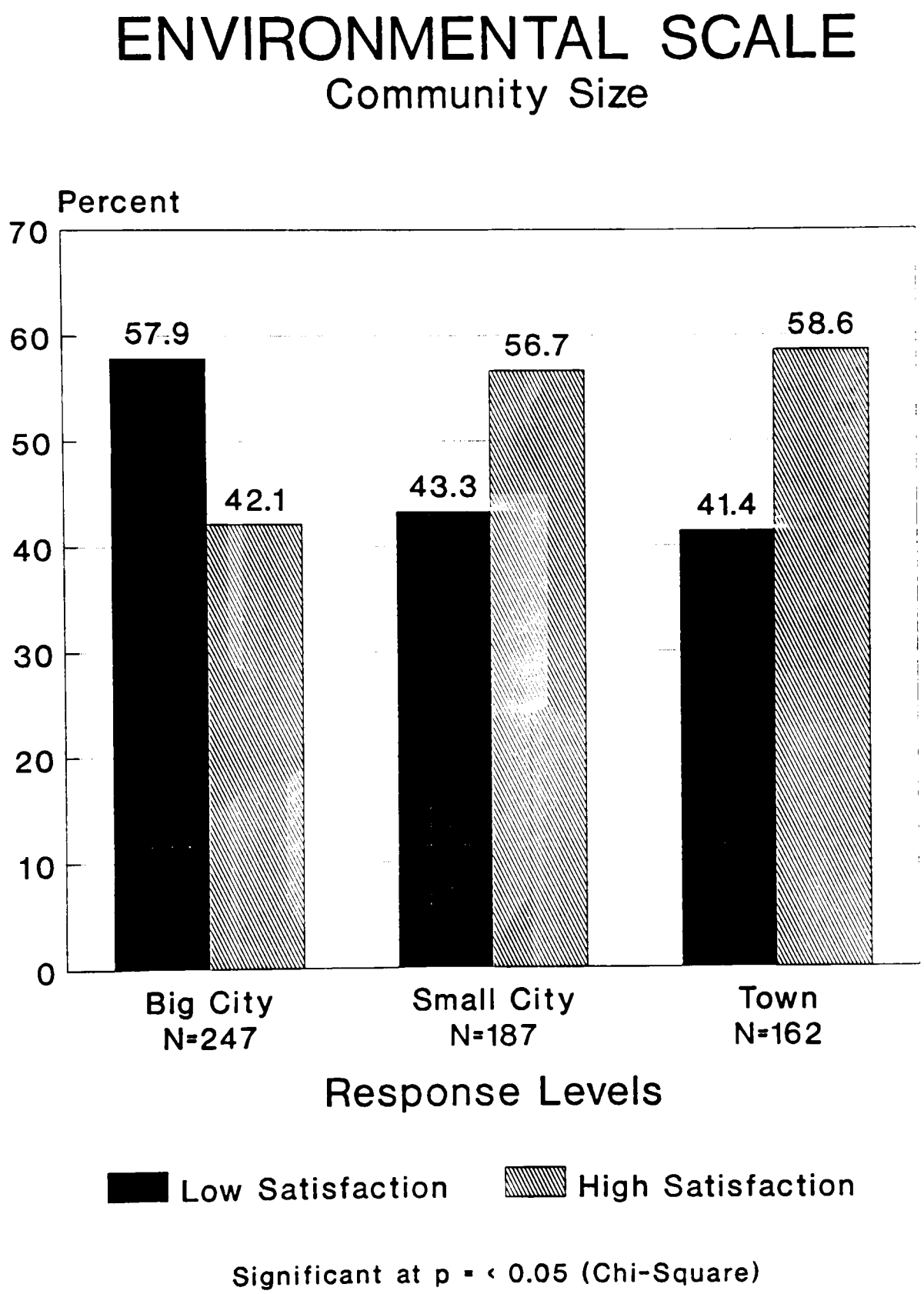

Figure 5. Demographic characteristic (community size) found significant in Question 1 and 2 of the study.

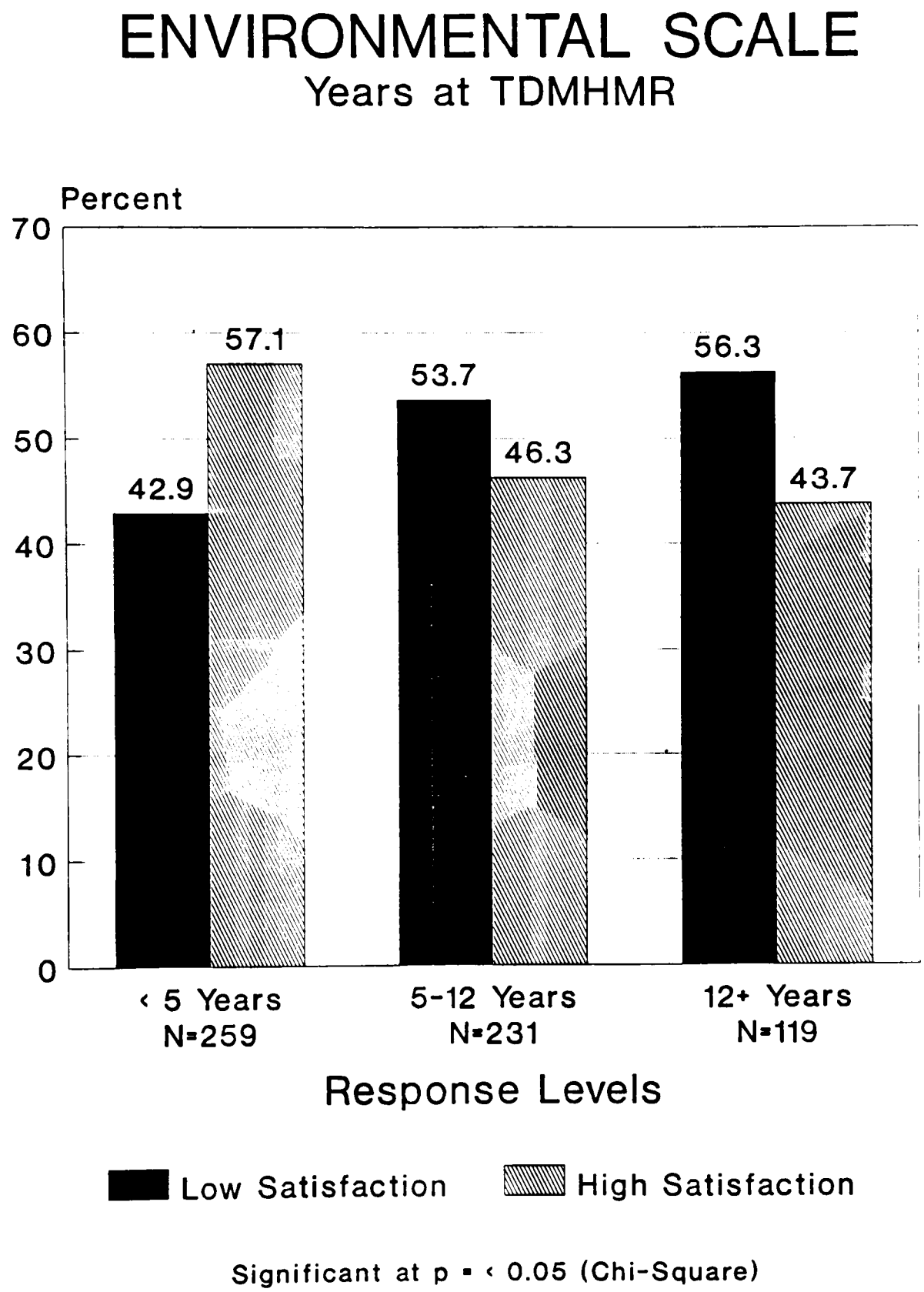

Figure 6. Demographic characteristic (years at TDMHMR) found significant in Question 1 and 2 of the study.

negative relationship. Table 10 illustrates the percentage of respondents who answered the questions as either most of the time or all the time. If the total percentage was above 50 percent, the variable was listed as positive and if it was below 50 percent, it was listed as negative. The table shows that the respondents were generally satisfied with the physical environment except in two areas, background noise and temperature and they were almost evenly split on their feeling about their supervisors. Figures 7 through 17 examine each of the variables.

Analysis of Results

Since the first two questions share the same findings they also support the same conclusions. It is very possible that people with more children tend to be more satisfied with the work environment because they view their environment differently from persons with one or no children. People with children might experience a lower standard of living due to the expense and time demands of their children. This could also translate into lower expectations about their environment at home and work. It is probable that the environment in one area could certainly have an impact upon the other.

People with more children may tend to be more family oriented and therefore activities outside the job could take precedence. These people may see the family as the center

Table 10. Percentage of total survey sample that reported high and low satisfaction with the specific physical attributes tested in Question 3 of the study.

HIGH & LOW SATISFACTION
PHYSICAL ATTRIBUTES

TOTAL PERCENTAGE REPORTING: Most of the Time or All the Time	
•POSITIVE SIDE (More than 50%)	
Kitchen: Lighting	79.6%
Work Area: Safe & Clean	79.3
Work Area: Large Enough	78.4
Kitchen: Right Equipment	70.7
Work Area: Good Co-workers	69.2
Work Area: Place I Like	66.7
Kitchen: Good Surroundings	57.7
Kitchen: Ventilation	57.1
• NEGATIVE SIDE (Less than 50%)	
Work Area: Supervisor	*49.2
Kitchen: Background Noise	41.6
Kitchen: Temperature	38.4

*Note: This was almost an even split and could possibly have been in either category.

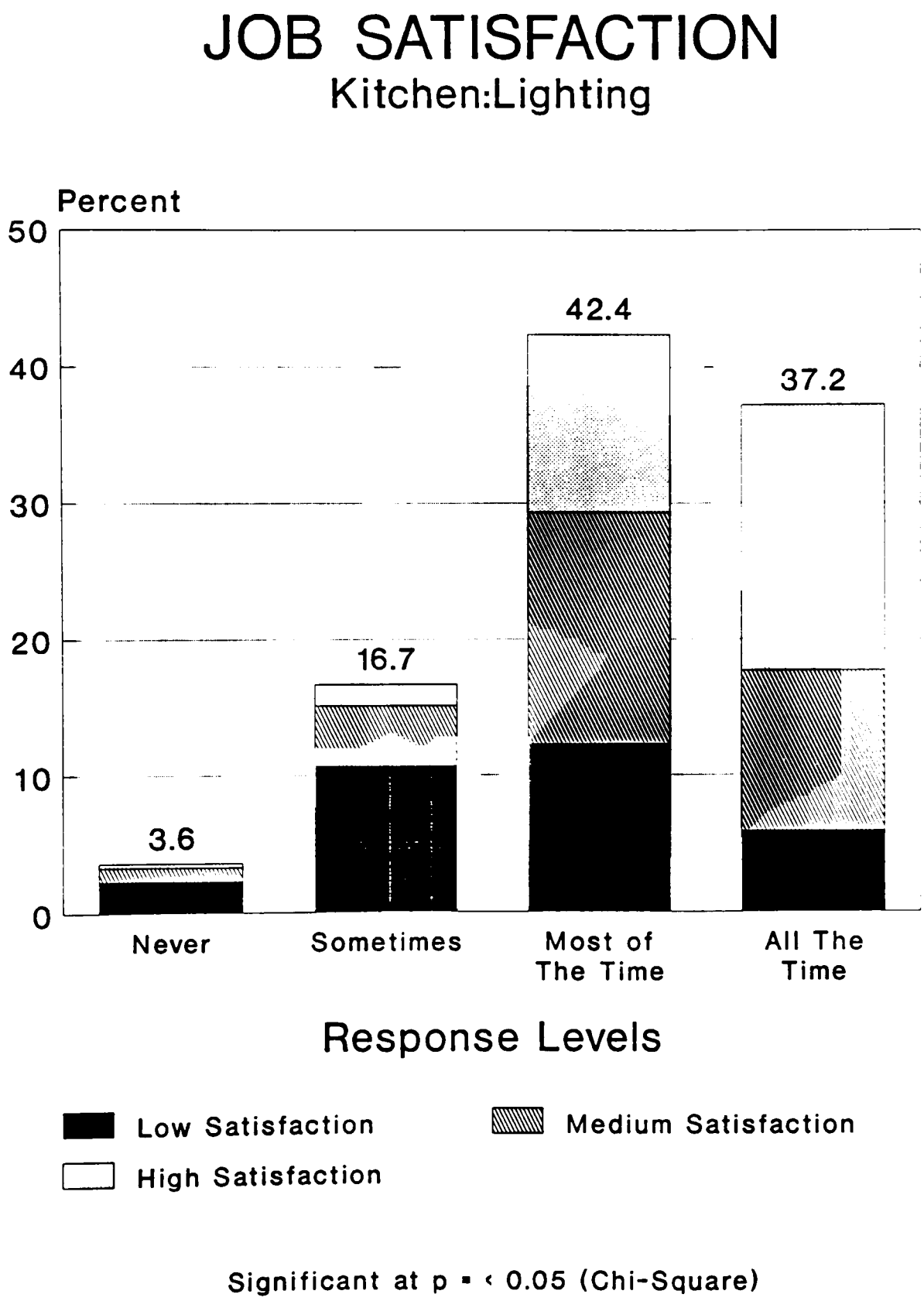

Figure 7. Physical attribute (kitchen:lighting) found significant in Question 3 of the study.

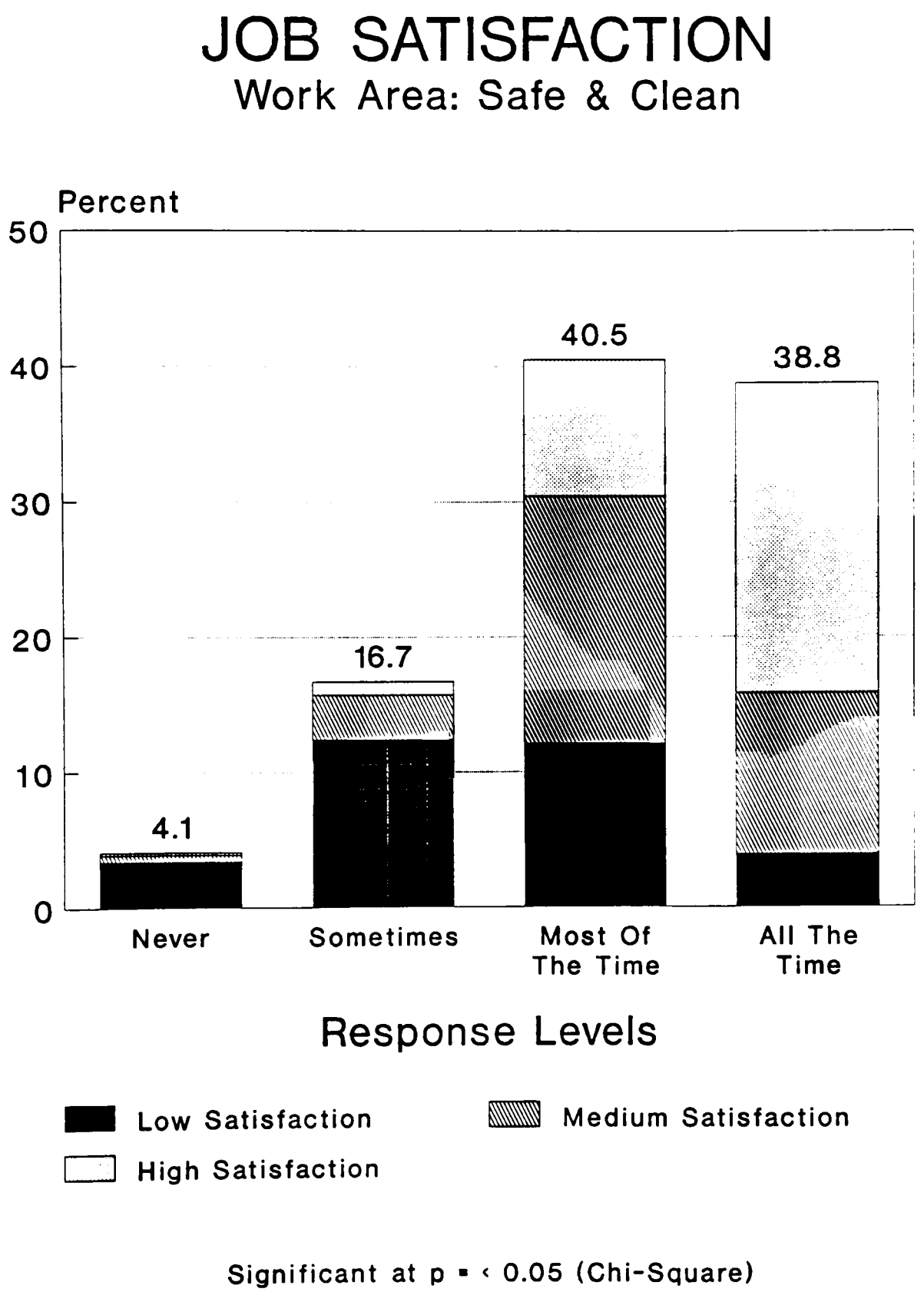

Figure 8. Physical attribute (work area:safe & clean) found significant in Question 3 of the study.

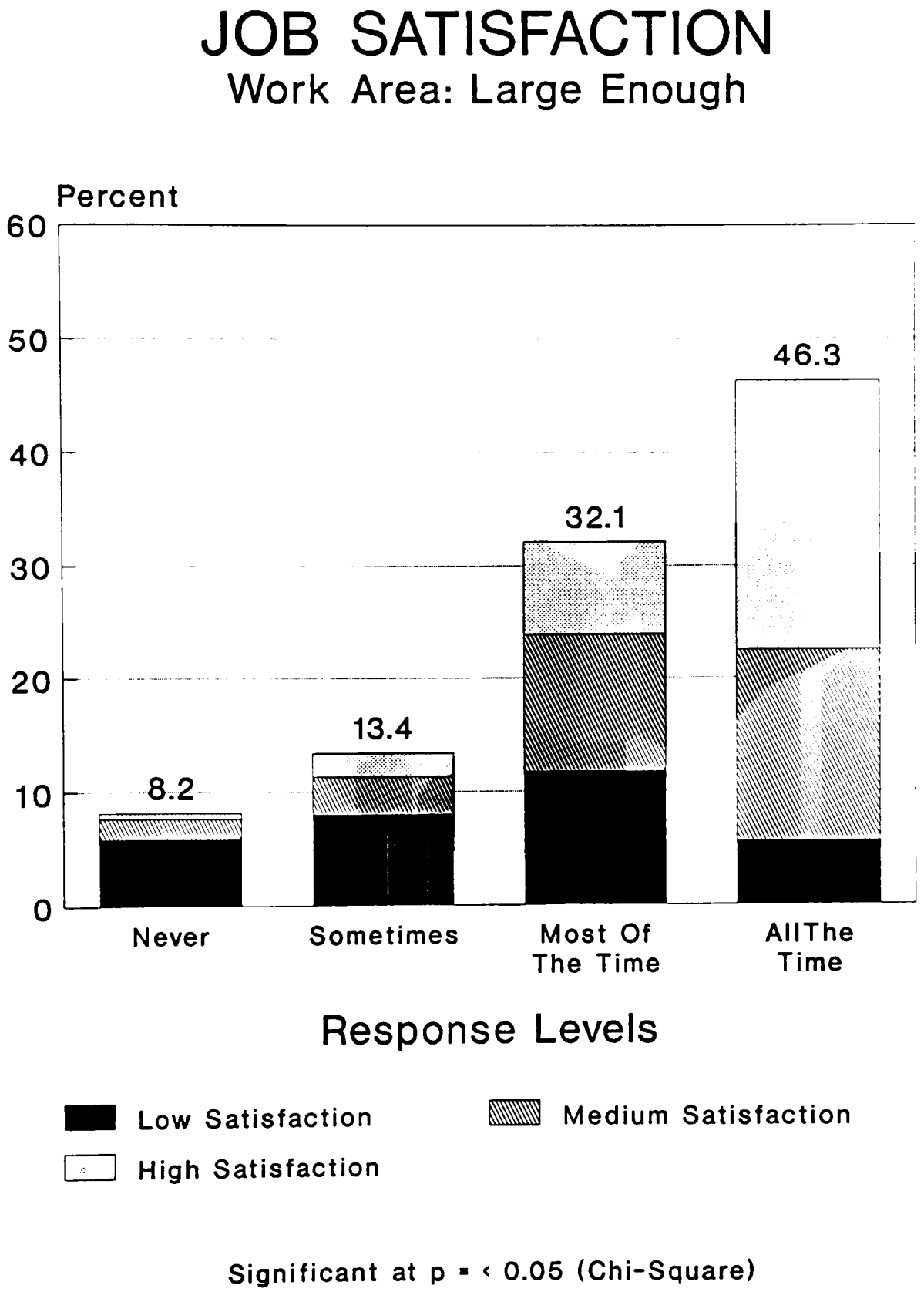

Figure 9. Physical attribute (work area:large enough) found significant in Question 3 of the study.

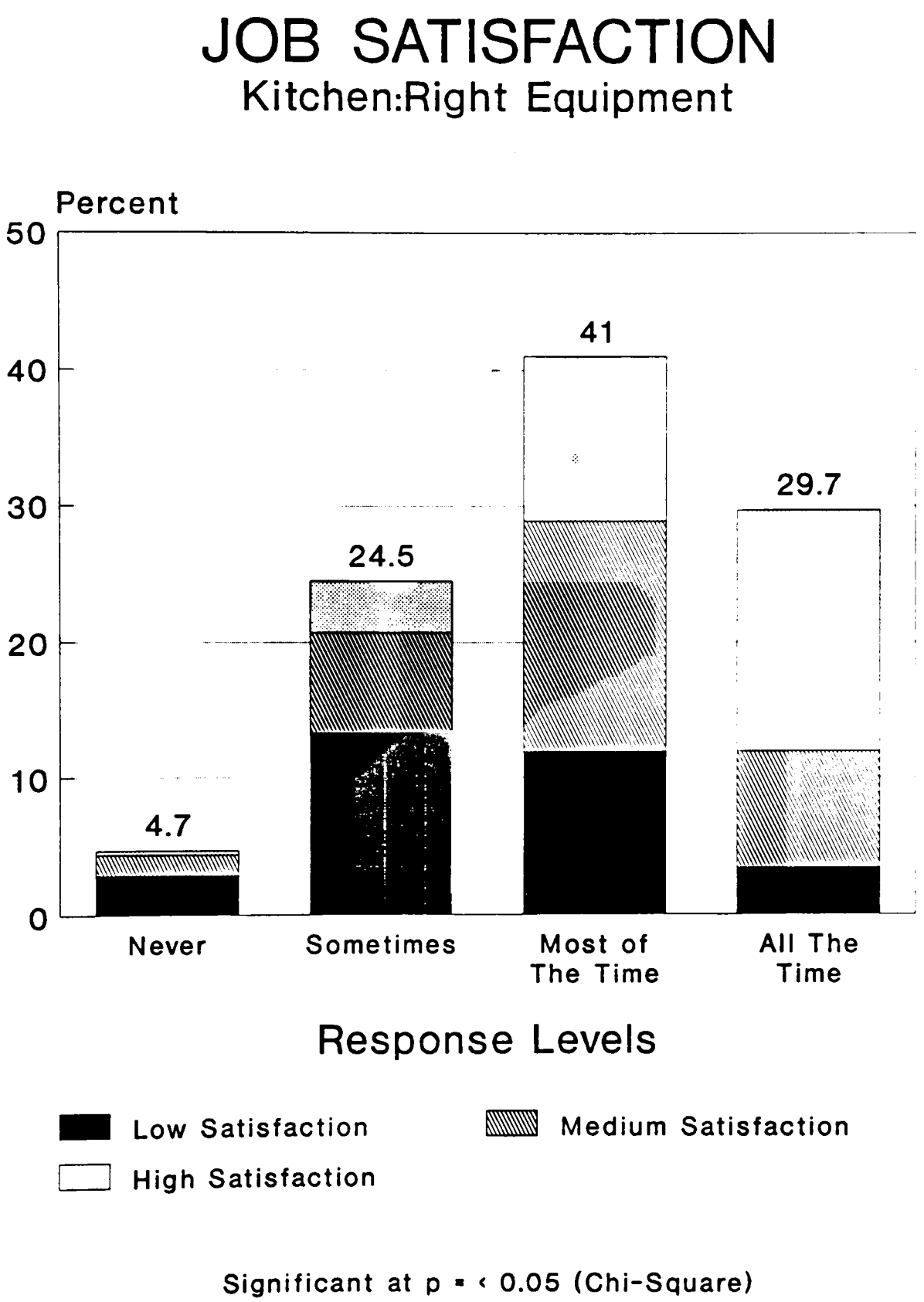

Figure 10. Physical attribute (kitchen:right equipment) found significant in Question 3 of the study.

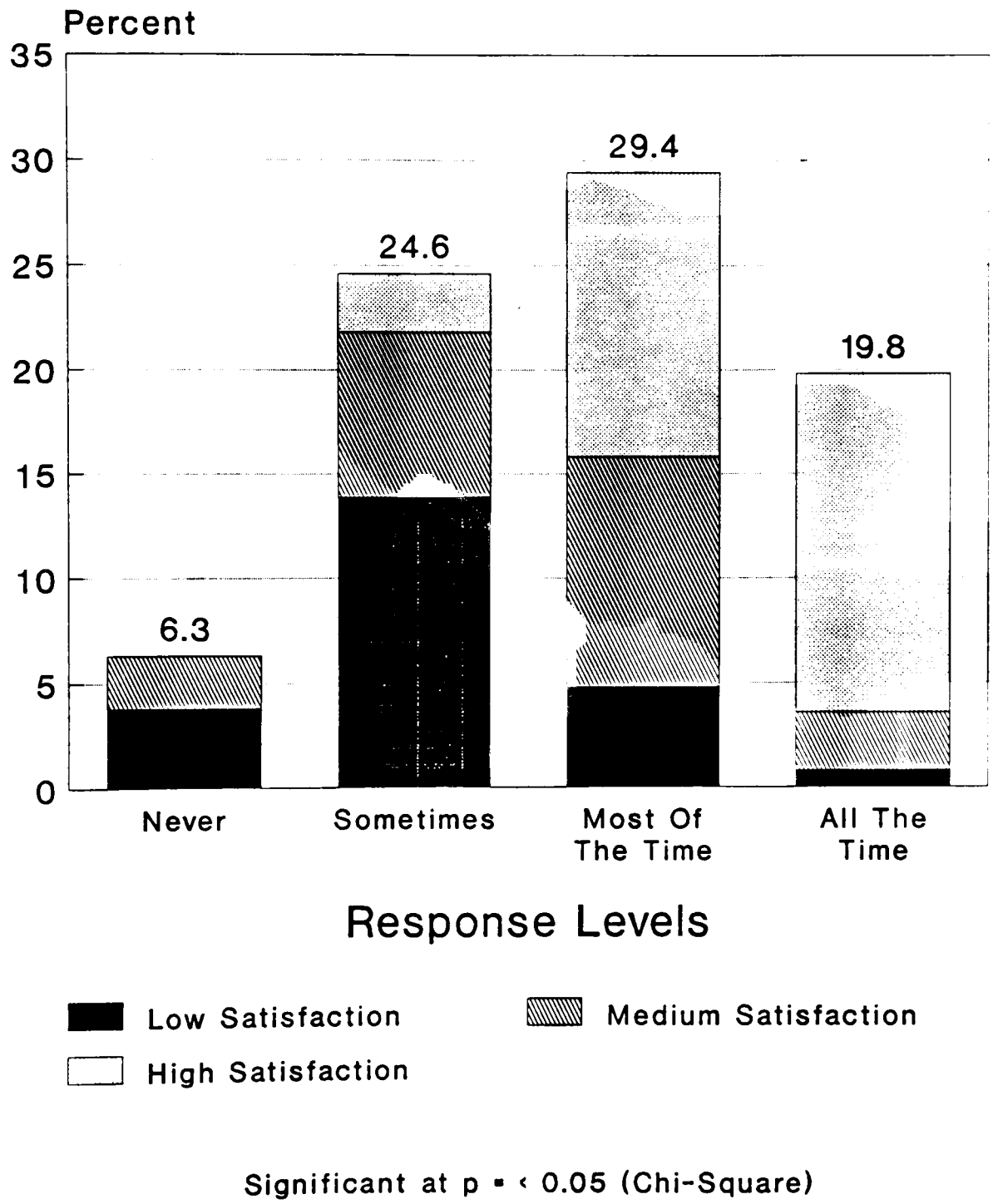

Figure 11. Physical attribute (work area:good co-workers) found significant in Question 3 of the study.

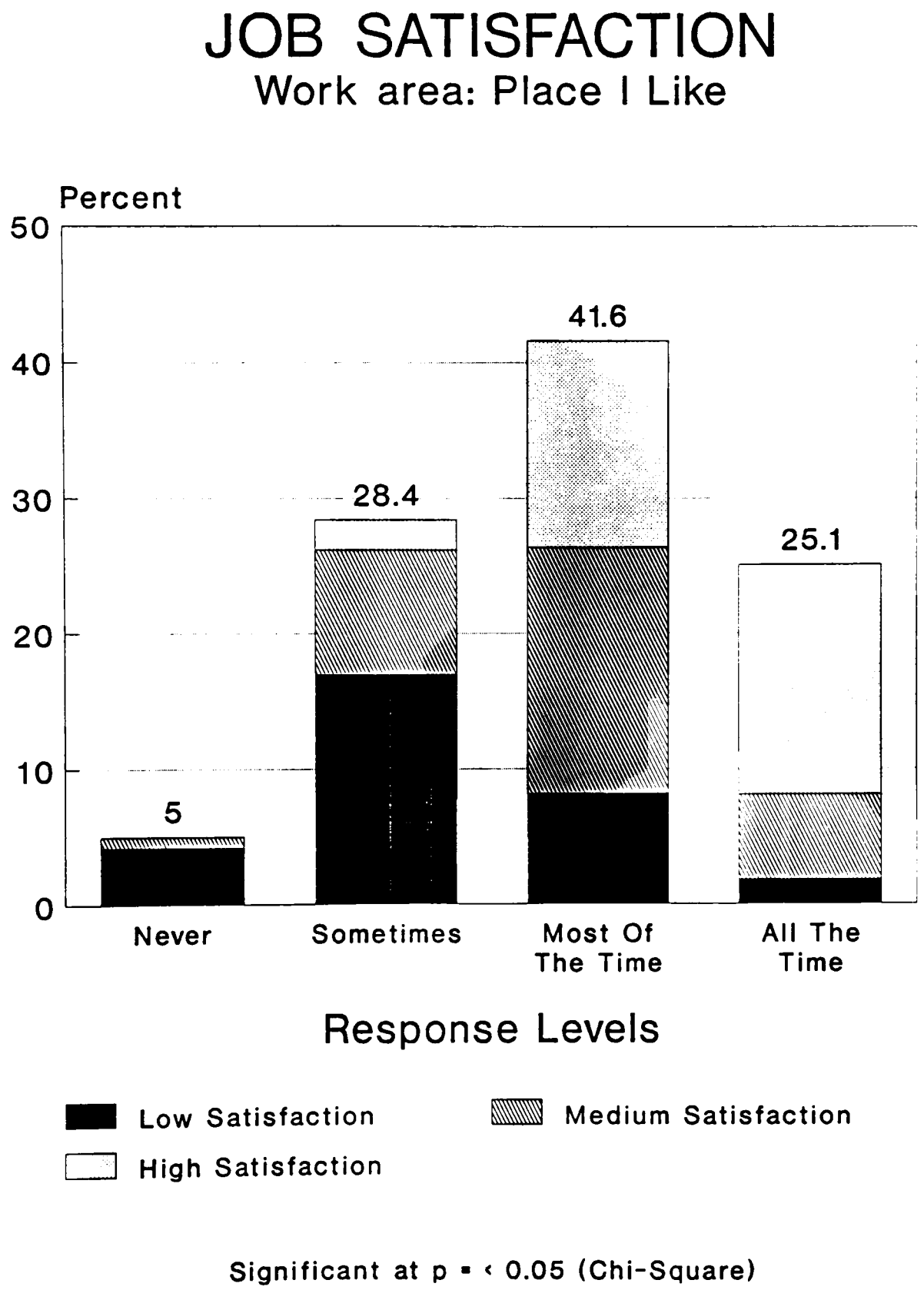

Figure 12. Physical attribute (work area:place I like) found significant in Question 3 of the study.

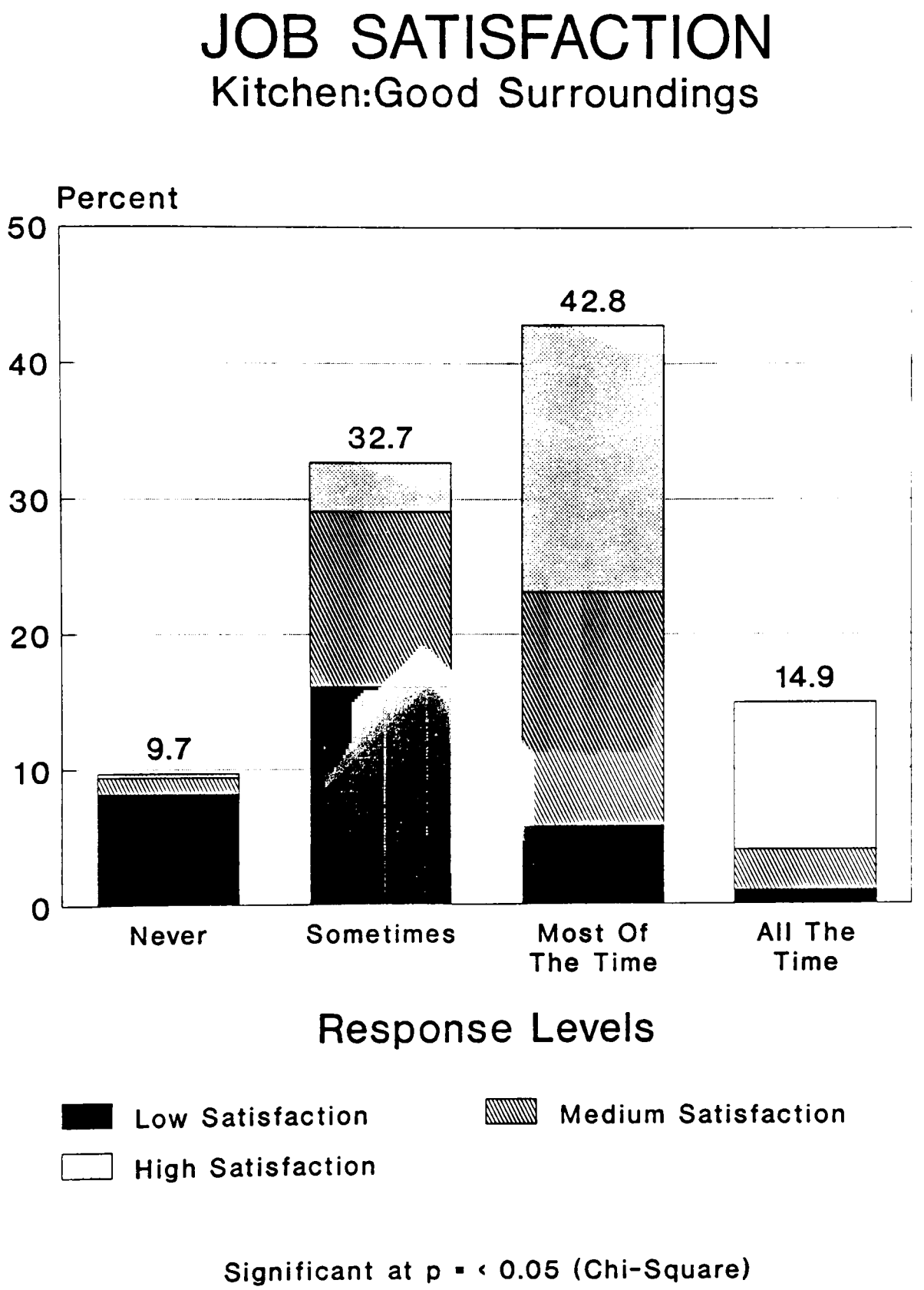

Figure 13. Physical attribute (kitchen:good surroundings) found significant in Question 3 of the study.

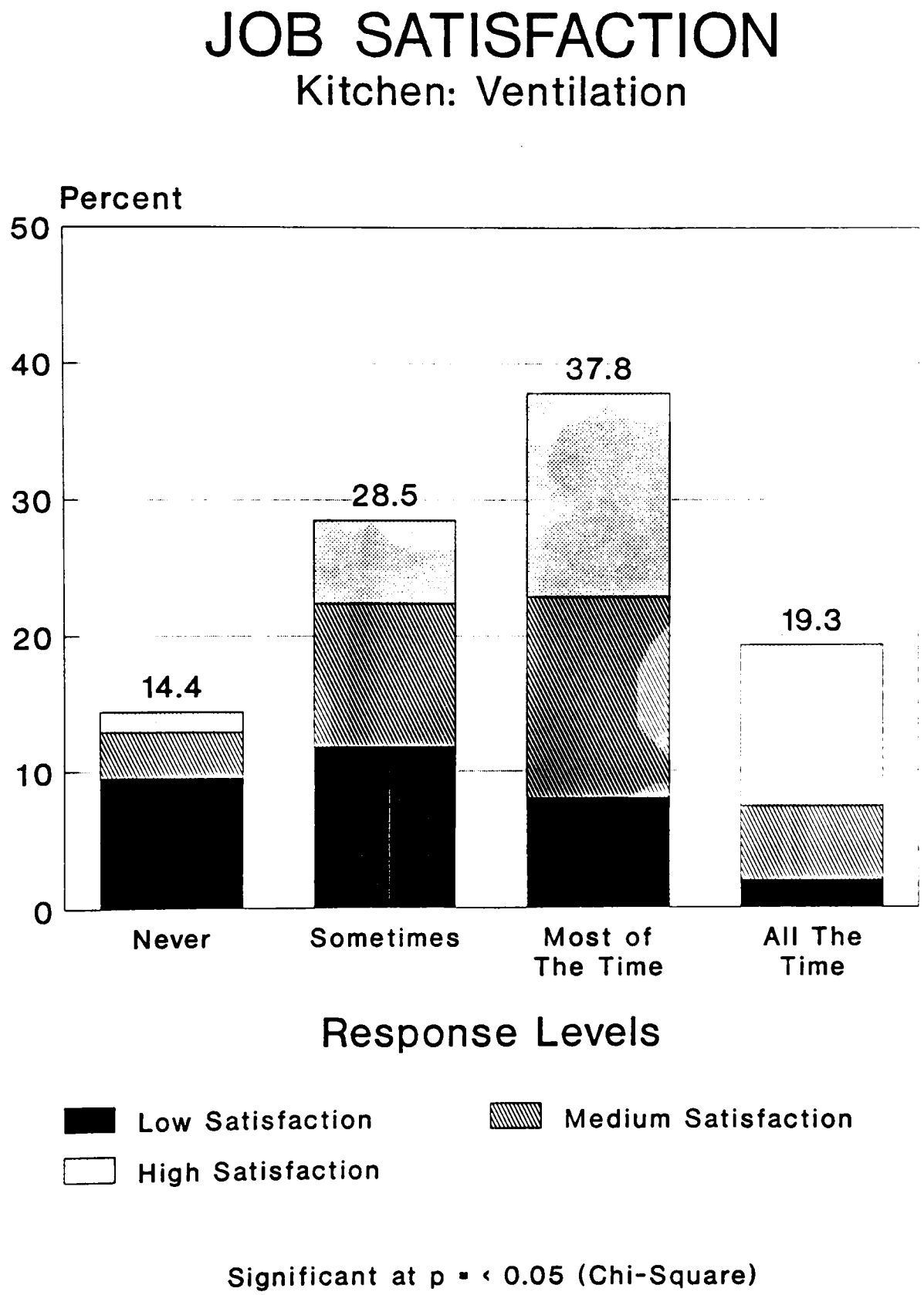

Figure 14. Physical attribute (kitchen:ventilation) found significant in Question 3 of the study.

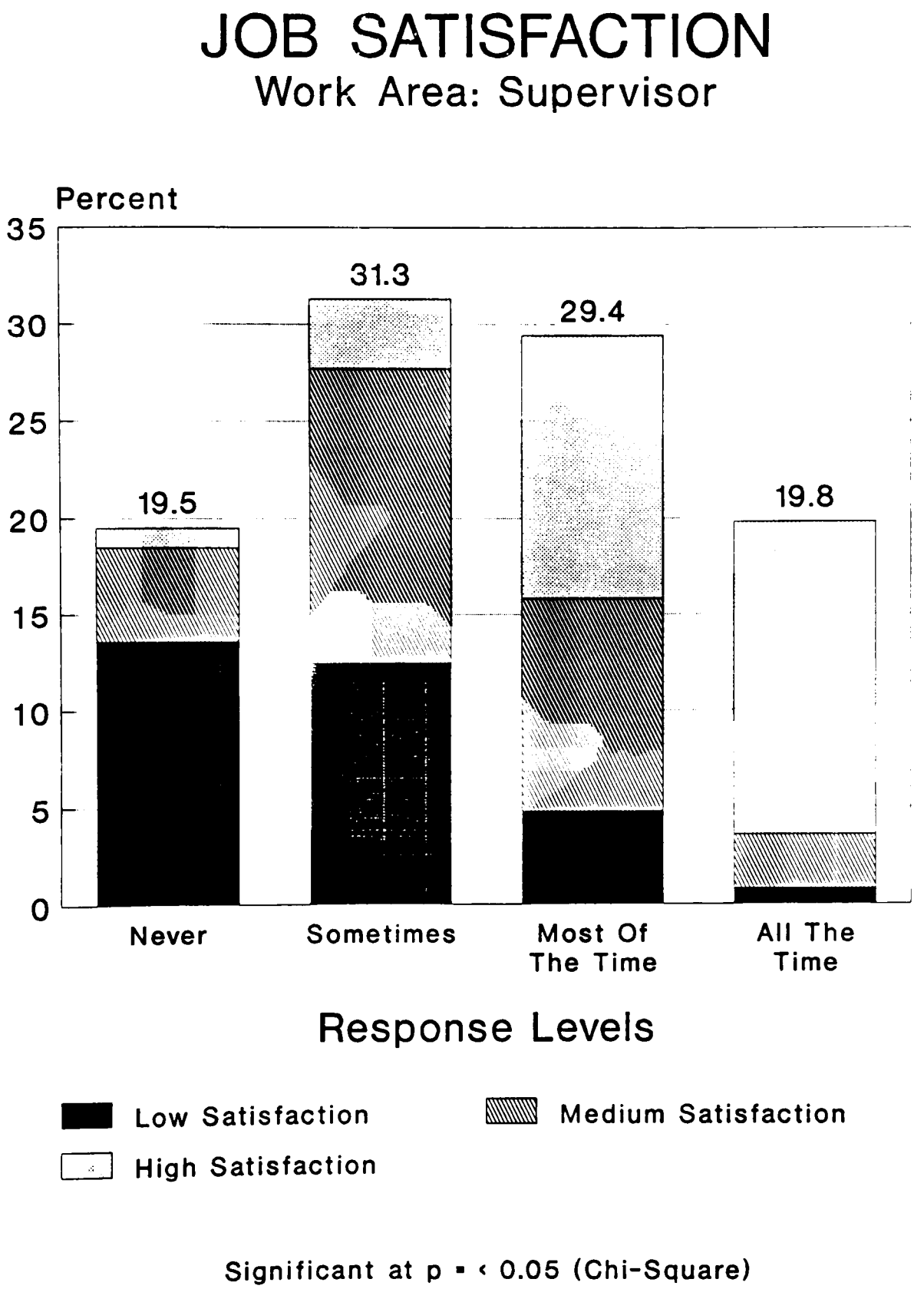

Figure 15. Physical attribute (work area:supervisor) found significant in Question 3 of the study.

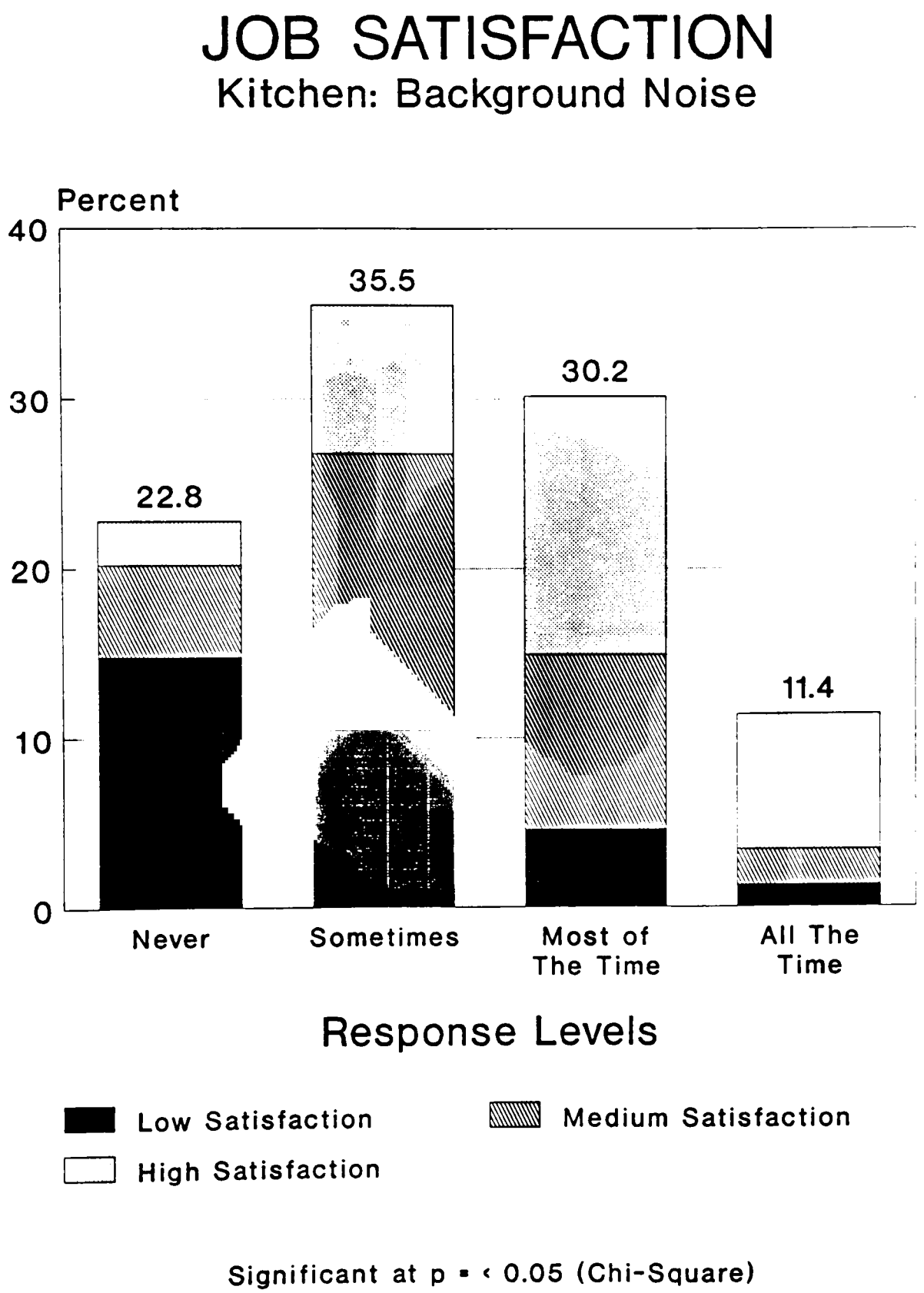

Figure 16. Physical attribute (kitchen:background noise) found significant in Question 3 of the study.

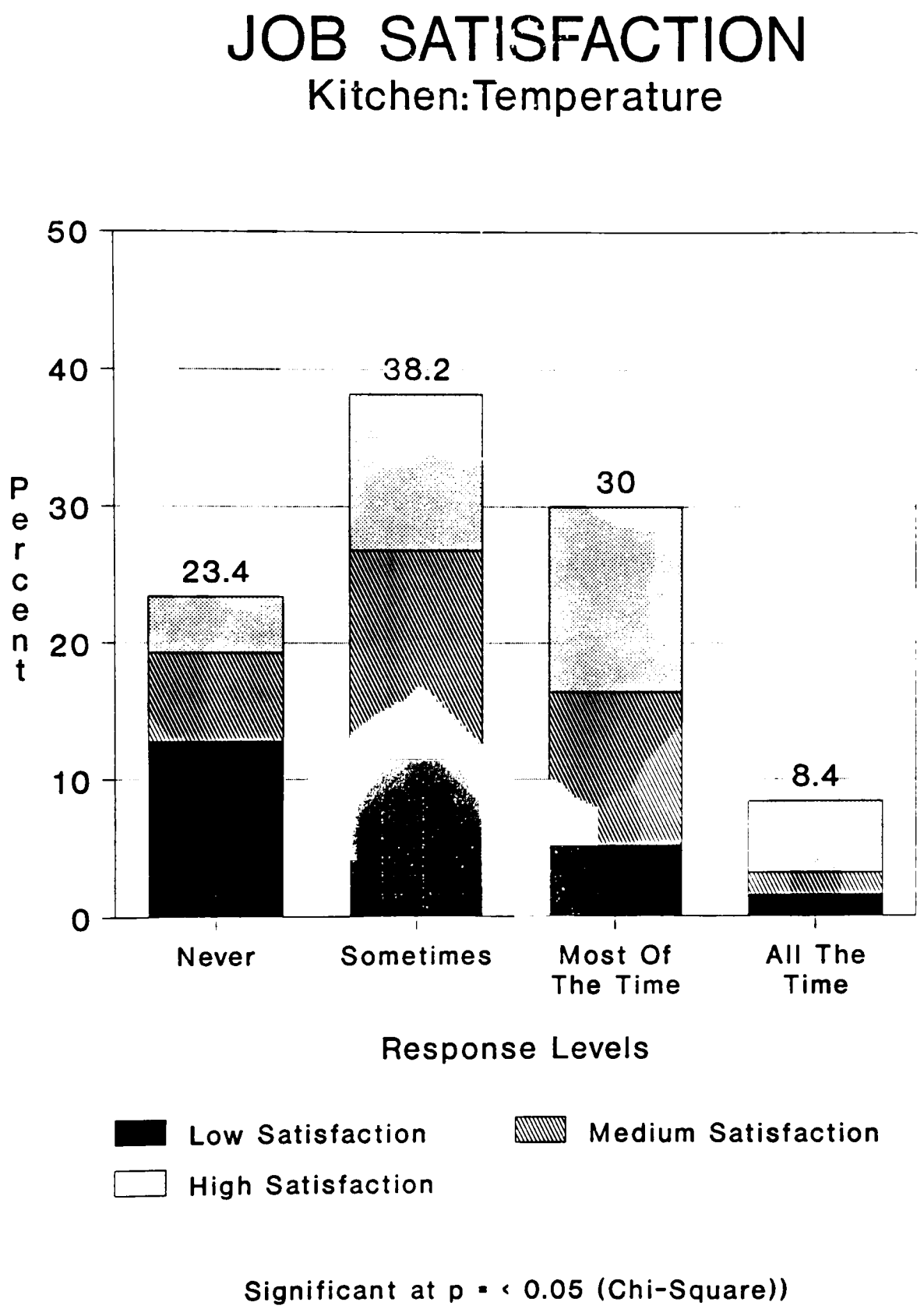

Figure 17. Physical attribute (kitchen:temperature) found significant in Question 3 of the study.

of their lives and are less cognizant of the work environment. Work is seen as a secondary concern. Conversely, it is conceivable that people with 1 or no children are more attuned to the environment because their job is the focal point of their lives.

Satisfaction may be a function of community size and the expectations of it citizenry. It is imaginable that people living in larger communities would have higher expectations as a result of the variety of job opportunities that exist. Higher expectations could induce workers to be more critical and vocal about their jobs. People in smaller communities may accept less because not as many steady employers are in the vicinity and they are happy just having a job.

The sense of community in small cities and towns could place priorities on things outside the job environment. People in larger cities would tend to experience more anonymity and could be more job oriented. It is feasible that people in larger cities are more career oriented and see the environment as more important to their job and career. The close proximity of people in large cities and environmental problems may play a role in making people more aware of their environment. People in larger cities may tend to be more educated and are more discriminating as a result.

Satisfaction tends to decrease across time with workers who have been employed longer than 5 years at TDMHMR. There could be several contributing factors. Employees at TDMHMR may experience a "honeymoon" period. As people work at a place longer and longer they tend to be more critical. Disparaging attitudes may develop due to lack of change in the environment, few promotions, small pay increases and relative job security. It is possible that as frustration across the years builds up people adopt a more cynical or negative attitude about their jobs.

Most of the foodservice employees are satisfied with the physical attributes that were examined. In general satisfaction ranged from ventilation at 57.1 percent to lighting at 79.6 percent and does suggest that there is room for improvement. Background noise and temperature were two areas with which most employees were definitely dissatisfied with.

Background noise could become a problem because foodservice production generates noise levels that at times bother people. Institutional foodservice has periods of peak activity that require concentration and cause noise levels to increase. The very nature of quantity food production, large equipment, dishwashers, deliveries, vent hoods and conveyors all add to the problems of noise.

Temperature has always been a problem where several people work in the same environment. Different people are

comfortable at varying temperatures. Kitchens have always been traditionally hot places to work. Deck ovens, steam kettles, cook tops, deep fryers and dishwashers all produce heat and contribute to the work environment being uncomfortable.

Limitations of the Study

A definite limitation of this study is that it was done only on institutional foodservice workers. This makes any broad generalizations or conclusions about foodservice difficult or impossible. Another limitation that exists is that it was only done on institutional foodservice employees of the State of Texas. If any comparisons or generalizations were made about other state or private institutional foodservice workers benefits, pay scales and other factors should be compared first. A variety of employment environments exists within the institutional foodservice sector. It should also be remembered that the population and sample of this study were not randomly selected. Both were done on a voluntary basis and not everyone chose to participate.

Summary

With the shifting demographic picture of the American workforce it is extremely important that employers pay attention to what workers see as important. The needs,

wants and desires of employees are changing. This study has only looked at one of the many facets that are of importance.

Demographics serve to illustrate the variety of workers' satisfaction with the physical environment. The biggest single message that this conveys is that workers are not a homogeneous commodity. Different groups and people have varied reactions in each situation. Employers need to be cognizant of those circumstances if they are going to be competitive in today's labor market. By being aware of these differences employers have an edge in recruiting and retaining of employees.

Specific physical attributes were shown to be very important to institutional foodservice workers in terms of overall job satisfaction. What is worth noting about those physical attributes is that the supervisor's image is unclear. What can be seen from the study is that supervisors might be able to improve their image by improving the physical environment. Supervisors are often in a position to listen to worker feedback and initiate change.

Temperature and background noise are two areas with which workers are not satisfied with and are undeniably looking for change. If supervisors were to solicit more feedback from the employees about the problems that this study has called attention to, it is possible that result

might manifest itself in a type of "Hawthorne Effect." By paying attention to the physical environment satisfaction could be increased among employees. As responses to the physical environment become more positive, it is likely that the image of the supervisor would be improved.

CHAPTER 5

CONCLUSIONS

The relationship of the physical work environment to job satisfaction is important, especially for employers in the foodservice industry. Studies in other industries reveal a growing amount of evidence that indicates a direct link between the physical environment and employee behavior (Olham & Fried, 1987). Researchers have been conscious for sometime about employees seeing the physical conditions of the work place as a top priority (Whitehill, 1976). Foodservice, a relatively young industry, has not addressed the importance of the physical environment to employee satisfaction.

Restaurateurs have traditionally seen the physical environment in terms of productivity. Technology and automation were a means to an end, with that end being productivity. Mechanization gave employers the double advantage of reducing the need for labor while maximizing the use of existing workers. Employers have habitually viewed the supply of labor as endless. It has been treated as a commodity that could be bought when needed and discarded whenever it was convenient.

Slowly employers in foodservice are becoming aware of the price of a disposable labor mentality. Hiring, training and replacing employees can be expensive business.

Estimates of replacing the average fast food employee can exceed $1,100 (Lydecker, 1988). Turnover rates may be as high as 300 percent annually (Wagel, 1989).

Employers are now also faced with a shrinking labor force and technologies that are increasingly complex. Competition for labor will be keen and that skilled workers will be increasingly difficult to locate. This increasingly crucial situation is a challenge that the foodservice industry will be forced to address.

Labor is not only a dwindling commodity, it is also changing. Young white males are rapidly being replaced by ethnic minorities, immigrants, elderly, women, physically challenged and mentally impaired. Single parent households and dual income families have dramatically increased in number. This demographic shift in America's labor force means that employers are going to be dealing with groups that have very different wants, needs and desires than people that they have predominantly dealt with in the past. Being competitive in such an environment will involve being aware of demographic differences and catering to those differences in employee recruiting, hiring, training and retention programs.

Advancing technologies and their application in foodservice has changed the physical work place and has made it increasingly important to employees. These employees will need better foodservice skills and as a result will

probably be more educated and better informed. As the demand for their skills increases these people could exercise more input and control over the working environment.

This study was an examination of the physical environment as it relates to job satisfaction. Demographic characteristics and specific physical attributes of the work environment were explored as they related to job satisfaction in the work place.

Three research questions were formulated:

1. Is there a difference between selected demographic characteristics and satisfaction with the physical environment of the work place?

2. Are there common demographic characteristics among people who report a high degree of satisfaction with the physical environment?

3. Are there specific physical attributes which are consistently identified as sources of high, medium or low satisfaction.

Results and Conclusions

Results of the study indicated that certain demographic characteristics do play a role in how people perceive the physical environment. Members of children, community size and years employed at the facility all played a role in employee perceptions. The study revealed that all the physical attributes tested did have a significant affect on

employees perceptions of job satisfaction with the physical environment.

It is thus indicated that demographic characteristics do influence people's perception of the physical environment. The study has demonstrated a definite link between job satisfaction and the physical environment of the work place. Employees are aware of their physical surroundings.

The study has also established that employees have opinions about the specific physical components of the work place and that those components are important to them. State institutional foodservice workers tested had immediate concerns about background noise and temperature. They were evenly split in their opinions about supervisors. Even the physical attributes with which workers were satisfied with could have been improved. Foodservice supervisors could use this information to their advantage. By listening to employees and instigating changes it would follow that they could enhance their own image, improve lines of communication, and amplify job satisfaction among employees.

The findings of this study can be a benefit to other sectors of foodservice. The physical environment is not a cure all for employee problems but it warrants employers attention. Quality of work life programs could be implemented to obtain employee feedback and input. The physical work place is an area that management can

effectively utilize in order to build a communication bridge between employer and employee. If prudent changes are made to the physical work place, through a labor management partnership, costs can be partially recovered from increases in employee satisfaction. Job satisfaction will translate into cost savings from reductions in training costs, increased employee retention and lowered absenteeism and tardiness rates.

Impact of the Study

The study is important because it addresses the critical need within the foodservice industry for change. Our labor force is changing and foodservice must evolve along with it. Changing demographic characteristics, shrinking numbers of potential employees and increased education levels among employees means that recruitment techniques, hiring policies, retention programs and training procedures will have be adapted and changed. This study demonstrated the need for change and suggested an avenue that employers might take to implement such changes.

Recommendations

Follow-up studies might be performed in other areas of foodservice to discover if similar results were obtained. Institutional foodservice workers in the private sector would be an excellent comparison population. Fast food

employees would present a totally different population for study and research.

This study looked to see if the physical environment played a role in job satisfaction but it did not attempt to measure satisfaction in precise terms. Additional research should be done to find out exactly what role demographics characteristics play and why they are significant. Research should also be done to ascertain whether other specific physical attributes are important to satisfaction with the physical environment and to more precisely measure their impact. Another avenue of research would be to do a follow-up study on a foodservice facility that actually carried out the suggestions of this study to determine their effectiveness.

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APPENDIX A
DATA COLLECTION INSTRUMENT

Questions for Practice

First there are some questions about yourself such as:

1. I am:
   _____(1) male
   _____(2) female

You make a check mark like this (✓), next to the right answer.

Next there are questions about your work.

Directions: Circle the number which indicates your choice
1 = never
2 = some of the time
3 = most of the time
4 = all of the time

A. MY WORK:

Holds my attention 1 2 3 4

Does my work hold my attention most of the time? If the answer is "all of the time," circle the 4. If it holds my attention "most of the time," circle the 3. If it holds my attention "some of the time," circle the 2, and if it holds my attention "never," circle the 1.

Most of the questions will ask you to choose this way. More examples:

A. THE ENTIRE KITCHEN WHERE I WORK HAS:

A comfortable temperature 1 2 3 4

A. MY PAY PROVIDES ENOUGH FOR:

Paying normal bills 1 2 3 4

The last sections ask you to rank your choices.

RANK YOUR BENEFITS FROM 7 TO 1 IN THE ORDER OF IMPORTANCE TO YOU:
7 = most important
6 = next most important
5 to 2 = next most important
1 = least important

___ Health Insurance
___ Paid Vacation
___ Paid Sick Leave
___ Life Insurance

THANKS SO MUCH FOR YOUR HELP!!! PLEASE KEEP YOUR PENCIL AS A "THANK YOU" FROM ME.

Job Satisfaction Survey

DIRECTIONS: Place a check (✓) in the appropriate blank.

1. I am :
_____(1) male
_____(2) female

2. My ethnic group is:
_____(1) American Indian
_____(2) Asian
_____(3) Hispanic
_____(7) Eastern Indian
_____(4) Black
_____(5) Anglo
_____(6) Middle Eastern

3. My age group is:
_____(1) under 21
_____(2) 21-30
_____(3) 31-40
_____(4) 41-50
_____(5) 51-60
_____(6) 61 and over

4. My current marital status is:
_____(1) never married
_____(2) married
_____(3) separated
_____(4) divorced
_____(5) widowed
_____(6) other

5. I have _____ (number) children.

6. There are _____(number) people in my present household.

7. The following people in my household contribute to the family's income:
_____(1) Only me
_____(2) Me and my spouse
_____(3) Me and a child or children
_____(4) Me and my spouse and a child or children
_____(5) Me and someone other than spouse or children

8. If married, my spouse is:
____(1) Employed full time all of the time
____(2) Employed full time most of the time
____(3) Employed part-time all of the time
____(4) Employed part-time most of the time
____(5) Employed very little or unemployed

9. My family's total income per year is:
_____(1) less than $5,000
_____(2) $5,000 to $14,999
_____(3) $15,000 to $24,999
_____(4) $15,000 to $19,999
_____(5) $25,000 to $34,999
_____(6) $35,000 to $44,999
_____(7) $45,000 to $54,999
_____(8) $55,000 or more

10. My highest level of education is:
_____(1) grades 1-8
_____(2) grades 9-11
_____(3) high school diploma
_____(4) some education or job training after high school
_____(5) bachelor's degree (four year college or university)
_____(6) graduate or professional or GEDeducation

11. In junior or senior high school, I took the following classes:
____(1) a home economics class where I learned basic cooking
____(2) home economics classes where I learned basic cooking and how to use large industrial cooking equipment
____(3) no home economics classes

12. I live in the following size of community:
____(1) big city of 500,000 or more
____(2) city of 50,000 -- 499,000
____(3) small city of 25,000 -- 49,000
____(4) small city of 10,000 -- 24,999
____(5) town of 2,500 -- 9,999
____(6) town of less than 2,500 or rural area

13. My job title is:
____(1) food service worker 1
____(2) food service worker 2
____(3) cook 1
____(4) cook 2
____(5) head cook 1
____(6) head cook 2
____(7) clerk
____(8) dietetic technician
____(9) dietetic assistant
____(10) assistant manager
____(11) manager 1
____(12) manager 2
____(13) dietitian 1
____(14) dietitian 2
____(15) chief dietitian
____(16) chief food service

14. I have been employed by TDMHMR (Texas Department of Mental Health and Mental Retardation) for:
____(1) Less than 1 year
____(2) 1 to 4 years
____(3) 5 to 8 years
____(4) 9 to 12 years
____(5) 13 to 16 years
____(6) 17 to 20 years
____(7) 21 years or over

15. I have worked in food service at other places of employment for a total of:
____(1) Less than 1 year
____(2) 1 to 4 years
____(3) 5 to 8 years
____(4) 9 to 12 years
____(5) 13 to 16 years
____(6) 17 to 20 years
____(7) 21 years or over

16. My current employment status is:
____(1) full time (40 hours)
____(2) between 21 and 39 hours
____(3) half-time (20 hours)
____(4) less than 20 hours

17. I work at another job now:
____(1) no
____(2) yes, 1-10 hours per week
____(3) yes, 11-20 hours per week
____(4) yes, 21 or more hours per week

PART I: THE WORK

Directions: Circle the number which indicates your choice

1 = never
2 = some of the time
3 = most of the time
4 = all of the time

	Never	Some of the Time	Most of the Time	All of the Time
EXAMPLE: My work is interesting (3) most of the time	1	2	(3)	4
A. MY WORK:				
Holds my attention	1	2	3	4
Meets my needs	1	2	3	4
Is interesting	1	2	3	4
Is creative	1	2	3	4
Has high value	1	2	3	4
Is pleasant	1	2	3	4
Is useful	1	2	3	4
Is good for my health	1	2	3	4
Offers me a challenge	1	2	3	4
Gives me a sense of getting things done	1	2	3	4
Has low stress	1	2	3	4

PART II. THE WORK ENVIRONMENT

Directions: Circle the number which indicates your choice

1 = never
2 = some of the time
3 = most of the time
4 = all of the time

	Never	Some of the Time	Most of the Time	All of the Time
EXAMPLE: The entire kitchen where I work is a comfortable temperature (1) never	(1)	2	3	4

A. THE ENTIRE KITCHEN WHERE I WORK HAS:

A comfortable temperature	1	2	3	4
Good lighting	1	2	3	4
Good ventilation	1	2	3	4
The right equipment to do the job	1	2	3	4
Background noise the way I like it	1	2	3	4
Surroundings that satisfy me	1	2	3	4

B. THE AREA OF THE KITCHEN WHERE I WORK IS:

Large enough for me to do my job	1	2	3	4
Safe and clean	1	2	3	4
A place that I like	1	2	3	4
A place that I enjoy because of my co-workers	1	2	3	4
A place where my supervisor will listen to my suggestions to make it better	1	2	3	4

PART III: THE PEOPLE AT WORK

Directions: Circle the number which indicates your choice

1 = never
2 = some of the time
3 = most of the time
4 = all of the time

	Never	Some of the Time	Most of the Time	All of the Time
EXAMPLE: My supervisor is smart (4) all of the time	1	2	3	(4)
A. MY SUPERVISOR:				
Asks my advice	1	2	3	4
Praises good work	1	2	3	4
Supervises enough	1	2	3	4
Knows his/her job well	1	2	3	4
Leaves me on my own	1	2	3	4
Corrects me in a nice way	1	2	3	4
Appreciates my work	1	2	3	4
Treats me fairly	1	2	3	4
Doesn't try to hurt people or make them angry	1	2	3	4
Has good manners	1	2	3	4
Is even tempered	1	2	3	4
Is smart	1	2	3	4
Is hard working	1	2	3	4
Understands my personal problems	1	2	3	4
B. MY CO-WORKERS ARE:				
Full of energy	1	2	3	4
Loyal	1	2	3	4
Dependable	1	2	3	4
Easy to get to know	1	2	3	4
Smart	1	2	3	4
Fun to be with	1	2	3	4
Willing to mind their own business	1	2	3	4
Hard workers	1	2	3	4
Friendly	1	2	3	4
Understanding of my personal problems	1	2	3	4

PART IV: COMPENSATION AND BENEFITS

Directions: Circle the number which indicates your choice

1 = never

2 = some of the time

3 = most of the time

4 = all of the time

	Never	Some of the Time	Most of the Time	All of the Time
EXAMPLE: My pay provides enough for paying normal bills (4) all of the time	1	2	3	(4)
A. MY PAY PROVIDES ENOUGH FOR:				
Paying normal bills	1	2	3	4
Paying normal bills and some luxuries	1	2	3	4
Paying for almost everything wanted	1	2	3	4
Paying for almost everything wanted and still save money	1	2	3	4
B. PROMOTIONS ARE:				
Something that I have a chance for	1	2	3	4
A reward for my good work	1	2	3	4
Fairly given	1	2	3	4
Given regularly	1	2	3	4
C. I AM SATISFIED WITH:				
Number of hours worked per week	1	2	3	4
My work schedule	1	2	3	4
Meal and break times	1	2	3	4
Parking arrangements	1	2	3	4
Amount of time it takes to drive to work	1	2	3	4
Number of days off per week	1	2	3	4
Feeling that I am "in" on things	1	2	3	4
Health insurance benefits	1	2	3	4
Paid vacation benefits	1	2	3	4
Paid sick leave benefits	1	2	3	4
Life insurance benefits	1	2	3	4
Retirement benefits	1	2	3	4
Longevity benefits	1	2	3	4
Credit union benefits	1	2	3	4

D. BENEFIT POSSIBILITIES

RANK YOUR BENEFITS FROM 7 TO 1 IN THE ORDER OF IMPORTANCE TO YOU:

7 = most important

6 = next most important

5 to 2 = next most important

1 = least important

___ Health Insurance

___ Paid Vacation

___ Paid Sick Leave

___ Life Insurance

___ Retirement

___ Longevity

___ Credit Union

IF YOU COULD HAVE ANY OF THE FOLLOWING BENEFITS, WHICH ONES ARE MOST IMPORTANT TO YOU. RANK FROM 9 TO 1 IN ORDER OF IMPORTANCE TO YOU.

9 = most important

8 = next most important

7 to 2 = next most important

1 = least important

___ Flexible Schedule (Different Each Week)

___ Day Care For Children Available At Work

___ Cash Allowance For Children's Day Care Expenses

___ Dental Insurance

___ Discount On Bus Service

___ Free Meals

___ Uniforms Furnished

___ Help For Further Education (GED or College)

___ Further Job Training

APPENDIX B
SCRIPTED OUTLINE OF INSTRUCTIONS

Instructions for Test Administration

Good Morning (afternoon)! I am happy to see all of you today! My name is Charlie Adams. I am a student at Texas Tech University in Lubbock. How many of you know where Lubbock is? Good. How many of you have been there? Good.

I am here conducting a research study for my school work. I teach in Hotel, Restaurant and Institutional Management and I want to know what you like about your jobs. To do this, I will ask you to answer some questions about yourself and your work. Don't worry, it is not a test! And I want you to know if you would rather not fill in out, that is O. K. but, I would really appreciate it if you would! I am visiting all the State Schools and State Hospitals in Texas and your answers will be added in with everyone else. And don't worry, your supervisors will not see your answers. I take these with me when I leave today and they never see them. I put them into the big computer at Texas Tech which adds them up and tells us what they mean.

Now, let's start with the back page where we have to put some things in the order that we like them. Let's work on this part together and then you can answer the rest on your own. You can talk to your neighbors and ask questions of them and of me. Remember, it is not a test. I just want to know how you feel about your work.

While you are working, I have a piece of candy for you.

When you are finished, I will pick up your paper. Thanks so much. You may keep your pencil as a thank you from me.

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Disagree (Permission not granted)	Agree (Permission granted)
_____	Charlie Adams
Student's signature	Student's signature
_____	Aug. 20, 1990
Date	Date