European Journal of Environment and Public Health 2022, 6(2), em0116

e-ISSN: 2542-4904

https://www.ejeph.com



Review Article

Job Satisfaction in Public Health Care Sector, Measures Scales and Theoretical Background

Ioannis Pantelis Adamopoulos 1,2,3* 💿

¹Region of Attica, Department of Environmental Hygiene and Public Health Inspection, South Sector of Athens, Athens, GREECE

²Department of Health Sciences, School of Medicine, European University Cyprus, Nicosia, CYPRUS

³Research Center of Excellence in Risk & Decision Sciences CERIDES, School of Sciences, European University Cyprus, Nicosia, CYPRUS

*Corresponding Author: adamopoul@gmail.com

Citation: Adamopoulos, I. P. (2022). Job Satisfaction in Public Health Care Sector, Measures Scales and Theoretical Background. *European Journal of Environment and Public Health*, 6(2), em0116. https://doi.org/10.21601/ejeph/12187

ARTICLE INFO	ABSTRACT
Received: 28 Apr. 2022	Public Health care organizations are the most important social systems in which human resources are the wealth
Accepted: 15 Jun. 2022	and central factor. This study is a literature review on job satisfaction in the public health care sector, giving tools to prevent with measures scales and information's in theoretical background. Evidence of job satisfaction in the public health care sector is encountered by Greek and Global public health organizations and services. Limited literature in connection and contribution of occupational health and safety with Job Satisfaction in the frame of policy and management. Public health care professionals and Administration managers in the healthcare services need to understand the benefits of adopting effective Job satisfaction.
	The aim of this research was to identify also analyze the knowledge of job satisfaction in the Public Health Care Sector, Measures Scales necessary to identify and knowledge objective to positively affect Public health professionals' job satisfaction and therefore health care sector quality services.
	Information's and knowledge produced an understanding of the mechanisms that increase job satisfaction and contribute to the improvement of psychosocial risks, and well-being to take appropriate measures and scales to create a Healthy and Hygiene working environment. Affects direct in health economics as well as organizational productivity, and quality of performance.
	A systematic review was conducted for the last two-year in Scopus, Web of Science, Science Direct, and Scientific Journals. There are very few papers published based on the very contemporary title considered for the article, classified as eligible according to the previously established criteria.
	Keywords: job satisfaction, public health care sector, measures scales, occupational public health

INTRODUCTION

Historical Review of Job Satisfaction

One of the first references to job satisfaction is the Hawthorne studies. These studies (1924-1933), dedicated initially to Elton Mayo of the Harvard Business School, attempted to assess the effects of various situations on employee reality. These studies have shown that changes in working conditions temporarily increase productivity (the Hawthorne effect) (Janson and Martin, 1982).

Scientific management has also had a significant impact on the study of job satisfaction. Taylor's (1997) book contributed to a change in philosophy in industrial production, leading to a more modern approach to work by creating teams and hourly wage workers. Initially, the increase in production was huge because the workers were forced to work quickly. Nevertheless, then the extermination work led to frustration and dissatisfaction, thus allowing researchers to answer many new questions about job satisfaction. Maslow's theory of the hierarchy of needs, a theory of motivation, established the theory of job satisfaction. This theory explains that people try to satisfy their five basic needs in the following order: routine, security, social, self-esteem, and selfrealization. This model was used as a basis on which the first researchers developed theories of job satisfaction (Gupta and Sharma, 2009). According to previous literature review, especially for psychosocial and organizational risk categories was found to be associated with burn out and job satisfaction (Adamopoulos and Syrou, 2022).

Conceptual Approach to Job Satisfaction

The satisfaction that people receive from their work has been the subject of study for many researchers. As defined by the international literature, studying the content of the

Copyright © 2022 by Author/s and Licensed by Veritas Publications Ltd., UK. This is an open access article distributed under the Creative Commons Attribution License which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

The most classical definition in the international literature is formulated by Locke (1970) in his two classic and critical works on job satisfaction. In his article "What is job satisfaction," Locke (1970) argues that job satisfaction is the positive emotional response of the individual to the work he performs, as long as his professional values are met.

In his book "Handbook of industrial psychology," Locke (1970) emphasizes evaluating the experiences gained by the employee. Thus, this definition highlights the importance of both emotion and knowledge as regulators of job satisfaction (Leung et al., 2000). An equally popular definition is formulated by Leung et al. (2000), which states that job satisfaction is related to the positive or negative feelings (job dissatisfaction) one has about one's job (Adamopoulos et al., 2022).

Theoretical Approach to Job Satisfaction

Job satisfaction is a popular research topic for researchers in organizing and managing organizational behavior studies. This happens because companies and organizations directly link job satisfaction with efficiency, reduced retirement intentions, higher commitment, desire to achieve goals and improved collaboration and teamwork within the company or the organism. A unique feature related to job satisfaction is the concept of motivation. Theories dealing with job satisfaction are essentially divided into two main categories (Celik, 2011):

- 1. **Ontological or content theories:** These theories focus on the content of motivation and try to identify and interpret the content, the type of needs and the factors that satisfy the individual.
- 2. **Mechanistic or procedural theories**: These theories focus mainly on the process of motivation, i.e., behaviors and conditions, and examine the types and categories of variables that contribute or not to job satisfaction and performance.

ONTOLOGICAL OR CONTENT THEORIES

As mentioned above, the theories of this category try to investigate what motivates the individual, i.e., those factors that are motivations for positive or even negative behavior.

Maslow's Theory of the Hierarchy of Needs

The psychologist Abraham Maslow (1908-1970) is considered the main inspirer of the theory of motivation based on a hierarchical model of needs consisting of five basic categories, starting from the lower to the upper levels with the following arrangement (Maslow and Lewis, 1987). The following are the categories starting from the lowest and ending with the highest (Maslow and Lewis, 1987):

Physiological needs

These are the biological needs of man, which are the background for the manifestation of any other higher need,

such as the need for oxygen, water, food, clothing, etc. These needs are the first that man tries to satisfy.

Security needs

This is the need for a person to feel the feeling of security that comes from his feelings and the feeling of selfpreservation. Such needs are related to the acquisition of permanent work, housing, and the provision of his everyday needs.

Social needs

This is the need of a person to belong to one or more social groups, to feel accepted, to develop friendships to feel love, sympathy, and affection.

Needs of respect and appreciation

These are the needs of man related to self-esteem, selfesteem, and appreciation by others, self-confidence, and recognition of one's role.

Needs of self-realization

These are the needs of man related to what he wants to do, the satisfaction of his visions, and expectations to reach the ideal model for him.

On a philosophical basis, of course, the question arises as to whether they need self-realization is ever satisfied, as well as what its real meaning is. It is a constant desire and pursuit for most people, thus being a constant motivator (McLeod, 2007). At this point, it should be emphasized, as pointed out by Mitchell et al. (1987), that Maslow's theory was the first precise formulation of the need to shift employers from meeting only the lowest level of employee needs, we refer indicatively to wages, promotions, hours, to the satisfaction of higher-level needs, such as autonomy, responsibility, and creativity (McLeod, 2007).

Alderfer Clayton Theory–Existential, Relatedness, Growth

Alderfer's (1969) theory is a modification of Maslow's theory and an extension of it, in which the five categories of needs are limited to three (Alderfer, 1969):

- 1. **Existential needs**, which include normal needs and security needs.
- 2. **Relationship needs,** related to the social environment, which fall under the respective social needs of Maslow.
- 3. **Growth needs,** to which Maslow's two highest categories of needs are the needs for self-esteem and self-realization.

The Hygiene Theory–Motivation or the Theory of the Two Factors of Herzberg

Herzberg presented a comprehensive theory of motivation based on the concept of job satisfaction, the employee's satisfaction with his work. His initial research was conducted through interviews, and his sample consisted of two hundred engineers and accountants, who were asked to report incidents from their working lives in which they felt an increase or decrease in the satisfaction they gained from their work (Alshmemri et al., 2017). According to the findings of this study, two categories of factors related to job satisfaction were identified (Alshmemri et al., 2017):

- 1. **Motivation factors:** The first category includes five sub-factors, which contributed to creating positive feelings of satisfaction. These work-related factors enhance employee motivation and lead to job satisfaction. These factors are the achievement, the recognition of the project, the nature of the work, the responsibility, and the possibility of promotion. These factors are called motivators because they motivate the individual to perform better and work harder.
- 2. Hygiene or maintenance factors: This second category includes factors related to the environment of the company or the organization and, in particular, dissatisfaction with work because these factors were mentioned more often in the narratives associated with negative feelings of dissatisfaction rather than in the narratives associated with positive feelings of satisfaction. These factors are related to the company's policy or the organization and how they are managed, the supervision, the remuneration, the interpersonal relations, and finally to the working conditions. Eliminating the factors of dissatisfaction does not mean that job satisfaction are avoided.

In practice, this means that management must have two different incentive mechanisms. A mechanism that will aim at creating a sense of satisfaction, through the enrichment and expansion of work, in a way that fascinates the employee and gives him the opportunity for personal achievement, development, and recognition, and a second hygiene mechanism that will work preventively to prevent dissatisfaction by controlling the management, pay, social, relations, and policy of the company or organization (Adamopoulos et al., 2022).

McGregor's Theory X and Y

Social psychologist McGregor (1960) formulated the bipolar theory.

Theory X

According to theory X, people by nature hate work and do what they can to avoid work. People who belong to this category feel safe and satisfied only when they avoid taking responsibilities and initiatives, while their characteristic feature is the lack of ambition. The management of each organization is responsible for finding ways to activate these employees, which only with threats and disciplinary implications increase their productivity.

Theory Y

Contrary to the above and according to theory Y, people are characterized by intense autonomy and creativity. If their work environment ensures a climate of trust, then they take the opportunity to develop their skills and align their ambitions with the company's goals. If rules and threats do not oppress employees, they take initiatives with responsibility and selfcontrol and increase their productivity and harmonize with the management's goals. The satisfaction that a good job gives is in itself the strong motivation for further improvement and effort. McGregor (1960) advises executives to adopt theory Y to better approach goals of the company or organization and to ensure the most excellent possible employee satisfaction.

McClelland's Theory of Achievement or Needs

McClelland (2013) argues that human needs are acquired, evolving within the individual's social environment. The basic needs according to this theory are three and must be met by each employee through his work:

- 1. **Need for achievement:** This need is cultivated and developed in man as a predisposition for realizing remarkable goals and achievements.
- 2. **Need for acceptance (affiliation):** This need includes building friendships, a climate of cooperation, respect, devotion, and confirmation from the team to which one belongs.
- 3. **Need for power:** This need includes the possibility of influence as well as the possibility of discrimination. The distinction between the different needs that each person may present during his / her work career also signals the work factors that determine his / her job satisfaction. An essential reference is made by McClelland (2013) as he argues that the needs analyzed above can be cultivated through education and adapt the individual to the appropriate type of work.

The Theory of Job Characteristics

Hackman and Oldham (1976) developed this theory refers to the existence of specific work characteristics that affect employee behavior and attitudes in different ways. It is based on the idea that work itself is the key to motivating employees. Specifically, a tedious and monotonous task acts as a deterrent to employees trying to achieve the goals set by the company or organization, while a problematic task strengthens the motivation to achieve them.

They mainly focus on the lack of objectivity, considering that the characteristics of the work are defined by subjective criteria (Hackman, 1980).

MECHANISTIC OR PROCEDURAL THEORIES

The expectancy theory was developed by Vroom (1964) (Yale University). It does not try to describe what motivates employees, as Maslow and Herzberg's theories do, but the process of motivation, that is, how the employee is motivated. The theory of expectations assumes that a person will act in a certain way when based on expectation, that his actions will lead to a specific result/goal, for the achievement of which he will receive attractive rewards (Van Eerde and Thierry, 1996).

Vroom (1964) presents three variables that play an important role in the employee's path to job satisfaction and can be attributed to the following relationship:

Motivation=Valence×Expectation×Instrumentality

According to Vroom's (1964) theory model, it is found that the individual will choose the appropriate form of behavior,

which will lead him to positive expected results in terms of job satisfaction. Motivation is a driving force for the employee to make an effort. In addition, performance seems to be a combination of the effort and ability that the employee puts into acquiring skills, education, and training. By gaining performance, the employee arrives at specific results. These results are sometimes possible for the employee to execute but do not reach the expected desired results, and this results in the employee starting the expectation process from the beginning. Going through all these stages of the model, each employee manages to obtain his job satisfaction (Van Eerde and Thierry, 1996).

Porter and Lawler's Process Theory Model

Lawler and Porter (1967) have relied heavily on the theory of expectation to construct a complete model of motivation and have applied it to their study of executives. The basic idea of this theory is that the concepts of motivation, satisfaction, and performance are three independent variables that are interrelated, although sometimes they make the concept of employee motivation a complex case (Lawler and Porter, 1967).

Locke's Goal-Setting Theory

This theory is based on the finding that every human action must be directed to a particular purpose. According to the theory of targeting, the origin of goals can be sought in the individual's values, motivations, and personality. The formulation of this theory is based on the view that the contents of motivations are the objectives. What motivates a person to be active are the goals regardless of the difficulty of achieving them, as long as they are clear, specific and not vague, and general. In addition, challenging goals associate the satisfaction one feels with higher performance levels than easy goals (Lunenburg, 2011).

The theory of targeting places particular emphasis on a personal commitment to a goal as an element that contributes significantly to achieving the goal. Individuals distinguished for the above characteristics have the following qualities (Locke and Latham, 2006).

- 1. A sense of purpose, in terms of the broader mission of the organization.
- 2. They use the core values of the team when making decisions and clarifying choices.
- 3. They are actively looking for opportunities to fulfill the team's mission.

The Theory of Equality and Justice Adams

According to this theory, employees follow equal and fair attitudes in their work (Adams, 1965). The concept of equality equates with satisfaction and inequality with dissatisfaction (Clay-Warner et al., 2005). The theory of equality is related to the theory of cognitive coherence (consistency) and the theory of exchange, which are two fundamental theories in the field of social psychology (Fatimah et al., 2011).

According to the theory of cognitive dissonance, which is the best-known theory of cognitive coherence, the individual's beliefs are in harmony with each other. If for some reason, the person's beliefs do not have continuity, consistency, and harmony with each other, the person is led to a state of psychological tension, which he tries to reduce with some energy in order to obtain the mental balance he needs (Fatimah et al., 2011).

Theories of social exchange are based on the idea that there are correspondences between individuals' social and economic behavior. Individuals in the formation of their social relationships make some investments from which they expect some benefits. They form some expectations and compare their contribution and the benefits obtained with the corresponding ones (contribution and benefits) of other people with whom they maintain social contacts (Clay-Warner et al., 2005).

The theory of equality belongs to the category of theories of social exchange and contains elements from the theories of cognitive cohesion. Equality theory can be applied to research and interpretation of relationships that take place in the work environment. Thus, if the employee compares his wages, recognition, and personal effort to those of his colleagues, and the ratio personal reward/personal offer=1, there is equality between what he offers and what he enjoys from his job and therefore feels fair (Nadiri and Tanova, 2010).

If the ratio personal reward/personal offer>1 indicates that the personal reward is greater than the personal offer, the employee has every reason to feel over-paid. Conversely, if the ratio personal reward/personal offer<1, then the personal offer is greater than the personal reward, and therefore, the employee may feel that he/she is under-paid (Nadiri and Tanova, 2010).

This function can be applied not only on a personal level but also to colleagues, comparing the ratio of his rewards/personal offers with that of others. If the reasons are equal, then there is a balance between his salary about that of his colleagues. If these reasons differ from each other, it is concluded that he is paid more or less than them (Fatimah et al., 2011).

If there is a discrepancy between the above reasons, according to the theory of cognitive discrepancy, the individual can (Adams, 1965):

- 1. Make a behavioral change, which can be either quantitative, a reduction or increase in employment time, or a qualitative change, such as the quality of the work produced.
- 2. To attempt a cognitive change, that is, to change how he thinks about himself, others, or his work.

METHODS OF ASSESSMENT-MEASUREMENT OF JOB SATISFACTION

Hulin and Judge (2003) state that measuring job satisfaction could accurately predict work behavior. These behaviors are absence, satisfaction and turnover, withdrawal, and the feeling of belonging to a group. Jayaratne (1993) states that the following characteristics of Job Satisfaction Measurements are necessary and valuable. These features were adapted by Portigal (1976) and include:

- 1. Indicators should measure the level of satisfaction at different levels of sum and express the same meaning.
- 2. Measurements should be distinguished between groups with the same differences as minorities and employee standard of living.
- 3. Measurements should be sensitive to the content and context of the work.
- 4. Measurements should be applied to different cultures and social classes and relevant to all sections of the workforce.
- 5. Measurements should be sufficiently valid.
- 6. Measurements should be closely linked to the theoretical basis.
- Measurements should have standardized data so that improvement and degradation can be judged based on changes in scoring.
- 8. The data in the indicators or the measurements from the job satisfaction should make sense for the interested party.

Job satisfaction, work attitudes, and work ethic is measured through interviews or questionnaires in which employees are asked to state the degree of satisfaction or dissatisfaction with the various aspects of their job roles (Taber and Alliger, 1995; Taber et al., 2015). The degree to which a subject is satisfied with their work results from their answers to one or more questions about the feelings they have about their work. Other more indirect methods have been developed, which, however, have not been widely used. Usually, researchers "adopt" older measuring instruments or make new ones meet their requirements at a given point in time. This dramatically limits the comparison of different surveys and implies relatively little information on problems related to grading, reliability, and validity (Gupta and Sharma, 2009).

Job satisfaction is always determined by exploring people's feelings about their work, either through a questionnaire or an interview. Dozens of scales can be entered into a questionnaire, and satisfaction is usually calculated this way (Gupta and Sharma, 2009). Often, more often in practice and not so much in research, employees are asked for their satisfaction. There are few cases in which job satisfaction is calculated through questions asked to supervisors or observers (Gupta and Sharma, 2009) to assess one's satisfaction (Spector, 1997).

In one survey, kindergarten children were asked to rate their parents 'satisfaction, and in another, men were asked about their husbands' satisfaction with their role as working women. In this study, men strongly agreed with their husbands' reports of satisfaction (Leung et al., 2000). Several researchers (Kendall et al., 1963; Macaulay et al., 1963) conducted a particular research project to measure job satisfaction. This research is a tool known as the job descriptive index (JDI), which is undoubtedly one of the most carefully constructed tools for measuring job satisfaction that exists. Extensive methodological work underlines the fact that this tool, in combination with the available norms, ensures its wide use both in research and in the field of practice (Vroom, 1964, 1966). The JDI scale includes five areas: employment, salary, promotion opportunities, supervision, and coworkers. Many users of this scale have added up to a total job satisfaction score. However, this is not the case with one of the scale manufacturers (Ironson et al., 1989; Leung et al., 2000). In total, it contains 72 questions, with nine or 18 questions for each subclavian. Each question refers to either an adjective or a short phrase describing the task. The answers are "yes," "you are not sure," or "no." For each area of the scale, a brief explanation is provided, followed by questions about it. Among other things, questions are provided that predispose positive and negative, respectively (Spector, 1985).

Researchers in organizational psychology commonly use the JDI scale. Cook and Hepworth (1981) documented more than 100 published studies using JDI. The extensive volume of surveys that use this measurement scale provides a sufficient number of data for its validity. Its most significant limitation is the fact that it has only five areas. There have been several criticisms that specific questions may not apply to all workgroups, and these reviews probably apply to all job satisfaction measurement tools.

One study, however, states that some of the areas of this scale can be divided into two parts. For example, satisfaction with supervision can be divided between satisfaction with the supervisor's ability and interpersonal skills (Riggio, 2017). Even though this is a reasonably valid scale, efforts have been made in recent years to improve it. Roznowski and Hulin (1992) used statistical methods to develop new questions that would significantly improve its reliability and validity.

Balzer et al. (2000) upgraded and improved the JDI scale by replacing some of the questions it included. It is also worth noting that they added a six-step scale for calculating total job satisfaction known as the job in general scale (JIG). Ironson et al. (1989) developed a scale for measuring overall job satisfaction that contains elements that do not reflect the various aspects of work. The JIG, as mentioned above, was based on the JDI scale (Kidd, 2006). It contains 18 elements that sometimes have adjectives and sometimes the form of short phrases for working in general. Three of these items are shown in the table below. This scale has good reliability and is adequately linked to other scales for measuring overall job satisfaction. Precisely because it is a relatively new scale, it has not yet been used in many research studies (Leung et al., 2000). The total score obtained from this scale is obtained by combining all the elements. As with the JDI scale, the JIG scale uses three answer options. For each item, participants are asked if they agree ("yes"), if they are unsure ("?"), or if they disagree ("no") (Leung et al., 2000).

An equally well-known job satisfaction scale is a questionnaire known as the Minnesota satisfaction questionnaire (MSQ). It is a multi-question evaluation scale that examines whether employees are satisfied or dissatisfied with their job (Dawis et al., 1968). This scale has two forms, a reasonably large version containing 100 questions and a shorter version containing 20 questions. Both versions have questions that explore around 20 areas of job satisfaction; however, the scores of these areas are calculated in the case of the big version. The short version is used to calculate either total job satisfaction or intrinsic and extrinsic satisfaction (Dawis et al., 1968).

Intrinsic satisfaction refers to the nature of work tasks and how people feel about the work they do. Exogenous satisfaction refers to other aspects of working conditions, such as benefits and wages. Both endogenous and exogenous satisfaction is a combination of different domains (Dawis et al., 1968).

For example, one such statement for the field of activity is "Being able to be constantly engaged in something." The overall scale is reliable and valid, but many researchers have questioned whether the questions are categorized for exogenous and exogenous groups (Leung et al., 2000). The twenty areas of this scale include the supervisor's ability, working conditions, pay, variety of responsibilities, level of job responsibility, and chances of advancement. The ratings marked on the MSQ are "very dissatisfied," "neutral," and "very satisfied." According to some studies, however, some of the 20 MSQ scales are pretty interconnected and may be limited (Leung et al., 2000).

Comparing the JDI scale with the MSQ scale, we find that the former is shorter than the latter. Both scales have been extensively researched and have high levels of reliability and validity (Smith et al., 1969, 1987; Weiss et al., 1967). However, an apparent difference between these two measurement tools is the number of areas being measured: the JDI scale measures five areas and the MSQ scale twenty. However, the question is how many areas are needed to measure job satisfaction (Riggio, 2017) adequately.

Finally, one validated scale to measure job satisfaction concerns the job satisfaction survey (JSS) questionnaire, a tool validated in Greeks by Tsounis and Sarafis (2018). The researchers tested the scale in a sample of 239 employees of different professions in drug addiction treatment. The authors conducted a confirmatory factor analysis and internal consistency analysis for the scale. The JSS is a multidimensional instrument and is one of the most frequently used job satisfaction scales. Tsounis and Sarafis (2018) concluded that it is a validated tool for assessing job satisfaction measures.

JOB SATISFACTION EMPIRICAL DATA

As mentioned above, job or professional satisfaction can be defined as the favorable or unfavorable aspect in which employees perceive their work (Raddaha et al., 2012). The study of job satisfaction levels has been attempted many times by many different researchers and in different countries and continents, as it is essential to know the degree to which employees feel good and satisfied with their employment.

At the same time, job satisfaction has been correlated and compared to various other concepts, such as burnout, organizational commitment, organizational culture, and patient satisfaction with the health services provided. Although all of these concepts are very different from each other, there are significant interactions between them and job satisfaction. Clarifying these interactions has been considered particularly important to prevent numerous negative situations in practical terms, finally, many factors, directly and indirectly, related to job satisfaction (Westover and Taylor, 2010). Finding and studying these factors from the various scientific researches through which job satisfaction is affected is significant as improving specific aspects of work can upgrade the working conditions of health professionals and increase their satisfaction to a great degree (Westover and Taylor, 2010).

The researches that studied job satisfaction are numerous and concern in many different regions of the world. For this reason, the present bibliographic review is divided into three subcategories: surveys conducted outside Europe, surveys within Europe, and surveys conducted in Greece.

Researches Outside of Europe

Savery (2007) studied the levels of job satisfaction about various satisfaction factors. The sample consisted of 100 nurses from a hospital in Perth, Western Australia, and their views were recorded using a questionnaire. According to the results, job satisfaction levels were encouraging, as 43% said they were very or delighted (Savery, 2007). No statistically significant correlation was found between job satisfaction and gender or other demographics. On the contrary, the level of satisfaction seemed to be related to age, since as the employee's age increased, so did his level of professional satisfaction. The latter finding agrees with other previous research (Lee and Wilbur, 1985; Savery, 2007), which argued for a statistically significant relationship between job satisfaction and age.

Job satisfaction and the factors that influence its various aspects have also been studied in South Africa through a recent survey of private sector general practitioners (Pillay, 2008).

The physicians who participated in this study were quite satisfied with their work's personal and social aspects but expressed their dissatisfaction with regulating labor issues and the pressures they receive in the professional environment (Pillay, 2008). The latter factors played a decisive role as they were enough for the participants to declare that they were dissatisfied and not satisfied with their work. Low job satisfaction was correlated with various variables, such as gender, where women show lower job satisfaction, years of internship, where people aged 20 or over are less satisfied with work or less, the work in big teams, and the supervision of many patients who are insured. In contrast, variables positively associated with high job satisfaction included, among other things, working in small groups, remuneration based on the service they provided, positive views on care management strategies, and clinical freedom (Pillay, 2008).

Raddaha et al. (2012) attempted to identify the factors that affect nurses' job satisfaction in three Jordanian healthcare providers. Bodur (2002) investigated the levels of job satisfaction and the factors associated with it about the health professionals of public health centers in Turkey. The research sample consisted of employees in 21 health centers in Konya, Turkey, while the primary tool of this study was the questionnaire. The results showed that the satisfaction rate of health professionals was 60%, a rate relatively low but similar to that found in surveys in other countries, such as that of Raddaha et al. (2012), while the satisfaction score was 3.8+/-0.5 (Bodur, 2002). Among the various health professionals, the lowest job satisfaction scores were recorded by women. Regarding the factors related to employee dissatisfaction, the most important were considered income and working conditions, while there was no statistically significant correlation with any other factor (Bodur, 2002). A fascinating question is whether health professionals' job satisfaction affects the benefits to patients and, consequently, the satisfaction of the latter with health care. According to a survey conducted in private hospitals in Damascus (Mahmoud and Reisel, 2014), in a sample of 325 nurses and 393 patients, occupational safety is directly related to job satisfaction, while the latter mediates in the relationship between patient satisfaction. The link between job satisfaction and patient satisfaction in health care has been found in other much older research (Cranny et al., 1992; Weisman and Nathanson, 1985). In this way, it is concluded that it is necessary to have safety at work to ensure employee satisfaction, and therefore patient satisfaction with the benefits of health professionals (Mahmoud and Reisel, 2014).

In the same context, Chen et al. (2011) investigated the role of job satisfaction in organizational commitment. A total of 643 questionnaires were completed by health professionals, from which it was concluded that job satisfaction affects organizational commitment through the professional plan and job position. At the same time, it has a partial effect on job security and personal satisfaction, directly related to professional commitment (Chen et al., 2011).

Researches in Europe

The relationship between job satisfaction and job characteristics was investigated in a relevant study in a sample of Russian physicians (O'Leary et al., 2009). According to the results, male physicians recorded higher levels of occupational satisfaction compared to females, indicating a relationship between gender and satisfaction. At the same time, the workplace seems to be of great importance, as the doctors working in polyclinics were more satisfied than those working in hospitals. Finally, it seems that the most critical factors that increase physician satisfaction are time constraints and administration (O'Leary et al., 2009).

Given the link between job satisfaction and some other phenomena, such as burnout, role conflict, and the appearance of psychosocial symptoms in employees, Piko (2006) looked at the interactions between different situations. The survey was conducted in Hungary in two large hospitals in the country, where anonymous questionnaires were distributed to 201 nurses. The results of this study showed that lack of job satisfaction is strongly associated with burnout and emotional exhaustion, a relationship that has been supported in the past by numerous other studies (Burisch, 2002; Kalliath and Morris, 2002), while job satisfaction a negative predictor of all types of burn out. Vocational satisfaction was also significantly associated with "schooling" (Piko, 2006).

An important question investigated by Lampinen et al. (2015) in Finland is how factors related to a sense of community in the workplace and job satisfaction are linked. This survey was conducted with the help of a questionnaire distributed to 136 health professionals in Finland. According to the results, the most important factors to which job satisfaction is related are the sense of work, the correct flow of information within the organization, open communication, and security. In addition, job satisfaction was significantly

correlated with experience and working hours, as people working full time seem to be more satisfied than those working only part-time (Lampinen et al., 2015).

According to a review study conducted on nurses in London by Newman et al. (2002), job satisfaction in this profession is linked to their knowledge that they have provided good quality care to their patients, as well as to various occupational services are such us colleagues, the acquisition of further knowledge and skills and professional development. In contrast, dissatisfaction can come from various negative comments, patient behavior, or staff shortages (Newman et al., 2002).

A study related to job satisfaction in general public hospitals in Cyprus showed that the highest percentage of employees (80%) say they are satisfied or very satisfied with their employment (Makris et al., 2011). More specifically, health professionals working at the Paphos hospital were more satisfied than those working at the Limassol hospital. This satisfaction is based on the employees' relations with their patients, their salary, and the unique character of their profession.

Researches in Greece

Job satisfaction has been widely researched in Greece by health professionals. Initially, Lampraki et al. (2016) studied the professional satisfaction and expectations from the work of the nursing staff in a general public hospital of Crete. The main factors that affect job satisfaction seem to be the object of work and the relationship of employees with their patients, while, on the contrary, the main factors of dissatisfaction were found to be lack of prospects for professional development, unfavorable working conditions, and poor (Lampraki et al., 2016). Trigonis (2014) measured the level of satisfaction of the health professionals of the General Hospital of Athens "G. Gennimatas" with the help of the organizational culture profile (OCP) questionnaire in a sample of 319 people. According to the results of this study, 41% of participants are satisfied with their work, while the most critical factors that affect their performance are supportiveness, performance orientation, and stability (Trigonis, 2014).

Job satisfaction levels were checked in 2007 for paramedical and nursing staff working in general public hospitals in Greece, while the same research sought to identify those parameters that affect the formation of satisfaction (Theodorou and Kaitelidou, 2007). This study was conducted by distributing a questionnaire to 151 health professionals and showed that half of the nurses (51.1%) are not satisfied with their work, while for paramedics, this percentage is 72%.

For more than four decades, work stress has been recognized as an essential factor that negatively affects job satisfaction (Murphy, 1995). Trivellas et al. (2013) investigated the effect of work stress, and in particular, of specific stressors, on job satisfaction, in a sample of 271 nurses employed in hospitals in Greece. Factors studied in job satisfaction were workload, conflicts, access to information, development prospects, and feedback aspects.

In 2013, Pelekas and Antoniadis (2012) conducted a comparative study on job satisfaction in two different hospitals in Greece. According to the results, the satisfaction

rates were relatively low in both hospitals, while no statistically significant difference was observed between the satisfaction values of nurses and doctors.

A relatively recent study attempted to investigate the perceptions of clinical leaders of hospital care services in Greece regarding the impact of organizational learning and the quality of services provided on employee job satisfaction (Pantouvakis and Mpogiatzidis, 2013). The sample consisted of heads of 123 departments of 15 Greek hospitals, and the survey was conducted based on a questionnaire. The results showed a positive effect of organizational learning and the quality of internal services on professional satisfaction, a fact that can improve the operation and efficiency of hospitals in our country (Pantouvakis and Mpogiatzidis, 2013).

In the same context, Bellou (2010) studied how job satisfaction is influenced by organizational culture, taking into account the age and gender of the participants. This research was conducted in three public hospitals in Greece, and the sample consisted of 125 health professionals (Bellou, 2010). According to the results, the employees in these hospitals accept specific characteristics of the culture, such as good reputation, opportunities for personal development, justice, and enthusiasm for their profession, as factors that enhance professional satisfaction.

CONCLUSIONS FROM THE ANALYSIS OF THEORETICAL APPROACHES TO JOB SATISFACTION

Studying the theories presented in the previous section, we observe that the leading theories concerning job satisfaction are more related to the theories of motivation. This is because satisfaction is a reaction of sympathy or dislike to the object of the attitude, and individuals approach the situations that satisfy them while moving away from the situations that cause them feelings of dissatisfaction.

In addition, most behavioral theories are based on the conclusion that individuals work to find what pleases them. This is why many theories of behavioral motivation are considered to some extent, theories of job satisfaction. Based on the theoretical approaches that have been presented so far and the plethora of studies that have been conducted in the field of job satisfaction, we find that job satisfaction depends on three conditions:

- 1. From the knowledge, skills, and personal characteristics of an employee.
- 2. From the motivation or energy, has to work.
- 3. From the work environment, such as technology, materials, information, administrative hierarchy, management systems required to perform a task.

Analyzing the concept of job satisfaction, we observe that different perspectives were developed to interpret this phenomenon. The reason is that there are many variables that directly or indirectly affect job satisfaction. As discussed in the theoretical approaches, job satisfaction can be based on factors that influence satisfaction and focus on motivation content. In contrast, others consider the motivation process and consider the types and categories of variables that contribute to or do not contribute to job satisfaction.

It is also found that personal factors that have to do with the employee's personality, experiences, and feelings can lead to job or dissatisfaction. In addition, demographic characteristics, such as age, gender, level of education, position, marital status, years of service, working hours, significantly affect job satisfaction. There is, therefore, a subjective attitude of the individual that is influenced by his expectations.

Another fact that we find from the study of theories of job satisfaction is that environmental factors, such as job characteristics, pay, equality, and justice in the workplace, have a significant impact on the satisfaction of the individual with his work. Equally important is the fact that factors such as frustration, alienation, technology, the importance of work, supervision, agreement, role conflict, and interpersonal relationships with colleagues and bosses play an essential role in creating job satisfaction (Adamopoulos et al., 2022).

Another important finding is that employees are motivated by inner satisfaction while performing their job duties. So many times, the combination of a variety of skills and the identity of the importance of the work assigned to them leads to job satisfaction.

In conclusion, we find that the theoretical approach to the phenomenon of job satisfaction is a complex issue whose investigation involves many aspects of human behavior. For this reason, we observe that many of the theories mentioned complementing each other, or one is an extension of the other.

Given the analysis of theoretical approaches, in this section, we summarize the factors that can promote job satisfaction in employees according to Locke (1970).

- 1. Work should be a challenge for the employee and not be tedious.
- 2. Good performance should be remunerated, and there should be a clear relationship between performance and employee. Remuneration should be considered as any benefit to the employee.
- 3. Give the employee positive reinforcement for successful work, i.e., verbal recognition, praise, and other non-monetary rewards.
- 4. To have good working conditions in terms of the environment and the configuration of the space.
- 5. To have proper supervision characterized by an interest in the employees and assistance to them during the execution of their work.
- 6. Have positive interpersonal relationships in the workplace between colleagues, supervisors, and employees.
- 7. To have an effective policy on the part of the company that assists the employees in their work.
- 8. To ensure job security and cultivate in employees the feeling that they are not in danger of losing their job.
- 9. To cultivate the feeling that monetary rewards are shared fairly.
- 10. To be able to involve employees in decision-making, especially in areas that they know well.

- 11. To give, as much as possible, a high degree of autonomy and responsibility to the employee.
- 12. Have role clarity as to precisely what the employee is expected to do.

In this section, an attempt was made to present the conceptual approach to job satisfaction and analyze the theoretical background of the concept. The researcher's conclusions have also presented as well as the determinants that affect the satisfaction of employees in their work. In addition to the theoretical background, it should be considered whether all these theoretical approaches are reflected and applied in the work environment. This is attempted to be presented in the next section by presenting empirical studies of the phenomenon of job satisfaction in general for employees, health workers and especially for employees in the public health sector.

Funding: No external funding is received for this article.

Declaration of interest: The author declares that there are no competing interests.

Ethics approval and consent to participate: Not applicable.

Availability of data and materials: All data generated or analyzed during this study are available for sharing when appropriate request is directed to the author.

REFERENCES

- Adamopoulos, I. P. and Syrou, N. F. (2022). Associations and correlations of job stress, job satisfaction and burn out in public health sector. *European Journal of Environment and Public Health*, 6(2), em0113. https://doi.org/10.21601/ejeph /12166
- Adamopoulos, I., Lamnisos, D., Syrou, N. and Boustras, G. (2022). Public health and work safety pilot study: Inspection of job risks, burn out syndrome and job satisfaction of public health inspectors in Greece. *Safety Science*, 147, 105592. https://doi.org/10.1016/j.ssci.2021. 105592
- Adams, J. S. (1965). Inequity in social exchange. In M. P. Zanna (Ed.), Advances in experimental social psychology (pp. 267-299). Academic Press. https://doi.org/10.1016/S0065-2601(08)60108-2
- Alderfer, C. P. (1969). An empirical test of a new theory of human needs. Organizational Behavior and Human Performance, 4(2), 142-175. https://doi.org/10.1016/0030-5073(69)90004-X
- Alshmemri, M., Shahwan-Akl, L. and Maude, P. (2017). Herzberg's two-factor theory. *Life Science Journal*, 14(5), 12-16.
- Bodur, S. (2002). Job satisfaction of health care staff employed at health center's in Turkey. *Occupational Medicine*, 52(6), 353-355. https://doi.org/10.1093/occmed/52.6.353
- Burisch, M. (2002). A longitudinal study of burnout: The relative importance of dispositions and experiences. *Work* & Stress, 16(1), 1-17. https://doi.org/10.1080/02678370110 112506
- Celik, M. (2011). A theoretical approach to the job satisfaction. *Polish Journal of Management Studies*, 4(1), 1-172.

- Chen, G., Ployhart, R. E., Thomas, H. C., Anderson, N. and Bliese, P. D. (2011). The power of momentum: A new model of dynamic relationships between job satisfaction change and turnover intentions. *Academy of Management Journal*, 54(1), 159-181.https://doi.org/10.5465/amj.2011.59215089
- Clay-Warner, J., Reynolds, J. and Roman, P. (2005). Organizational justice and job satisfaction: A test of three competing models. *Social Justice Research*, 18(4), 391-409. https://doi.org/10.1007/s11211-005-8567-5
- Cranny, C. J., Smith, P. C. and Stone, E. (1992). *Job satisfaction: How people feel about their jobs*. New York: Lexington Books.
- Gupta, M. and Sharma, P. (2009). Job satisfaction level among employees: A case study of Jammu region, J&K. *IUP Journal* of Management Research, 8(5), 17-27.
- Hackman, J. R. (1980). Work redesign and motivation. *Professional Psychology*, 11(3), 445-449. https://doi.org/10. 1037/0735-7028.11.3.445
- Hackman, J. R. and Oldham, G. R. (1976). Motivation through the design of work: Test of a theory. *Organizational Behavior and Human Performance*, 16(2), 250-279. https://doi.org/10.1016/0030-5073(76)90016-7
- Hulin, C. L. and Judge, T. A. (2003). Job attitudes. In W. C. Borman, D. R. Ilgen and R. J. Klimoski (Eds.), *Handbook of psychology: Industrial and organizational psychology* (pp. 255-276). John Wiley & Sons Inc.
- Ironson, G. H., Smith, P. C., Brannick, M. T., Gibson, W. M. and Paul, K. B. (1989). Construction of a job in general scale: A comparison of global, composite, and specific measures. *Journal of Applied Psychology*, 74(2), 193-199. https://doi.org/10.1037/0021-9010.74.2.193
- Kalliath, T. and Morris, R. (2002). Job satisfaction among nurses: A predictor of burnout levels. JONA: The Journal of Nursing Administration, 32(12), 648-654. https://doi.org/ 10.1097/00005110-200212000-00010
- Kendall, L. M., Smith, P. C., Hulin, C. L. and Locke, E. A. (1963). The relative validity of the job descriptive index and other methods of measurement of job satisfaction. Ithaca, NY: Cornell University Press.
- Kidd, C. A. (2006). An exploration of the impact of employee job satisfaction, affect, and performance on organizational financial performance in the health care industry [Doctoral dissertation, University of Louisville].
- Koustelios, A. and Tsigilis, N. (2005). The relationship between burnout and job satisfaction among physical education teachers: A multivariate approach. *European Physical Education Review*, 11(2), 189-203. https://doi.org/10.1177/ 1356336X05052896
- Lampinen, M. S., Viitanen, E. A. and Konu, A. I. (2015). Sense of community and job satisfaction among social and health care managers. *Leadership in Health Services*, 28(3), 228-244. https://doi.org/10.1108/LHS-09-2014-0067
- Lampraki, M., Vlasiadis, K., Paterakis, G. and Filalithis, A. (2016). Expectations and satisfaction of the nursing staff from their work in a public general hospital. *Archives of Greek Medicine*, 33(4), 472-478.

- Lawler, E. E. and Porter, L. W. (1967). The effect of performance on job satisfaction. *Industrial Relations: A Journal of Economy and Society*, 7(1), 20-28. https://doi.org/ 10.1111/j.1468-232X.1967.tb01060.x
- Lee, R. and Wilbur, E. R. (1985). Age, education, job tenure, salary, job characteristics, and job satisfaction: A multivariate analysis. *Human Relations*, 38(8), 781-791. https://doi.org/10.1177/001872678503800806
- Leung, T. W., Siu, O. L. and Spector, P. E. (2000). Faculty stressors, job satisfaction, and psychological distress among university teachers in Hong Kong: The role of locus of control. *International Journal of Stress Management*, 7(2), 121-138. https://doi.org/10.1023/A:1009584202196
- Locke, E. A. (1970). Job satisfaction and job performance: A theoretical analysis. Organizational Behavior and Human Performance, 5(5), 484-500. https://doi.org/10.1016/0030-5073(70)90036-X
- Locke, E. A. and Latham, G. P. (2006). New directions in goalsetting theory. *Current Directions in Psychological Science*, 15(5), 265-268. https://doi.org/10.1111/j.1467-8721.2006. 00449.x
- Lunenburg, F. C. (2011). Goal-setting theory of motivation. International Journal of Management, Business, and Administration, 15(1), 1-6.
- Macaulay, D. A., Smith, P. C., Locke, E. A., Kendall, L. M. and Hulin, C. L. (1963). Convergent and discriminant validity for measures of job satisfaction by rating scales. Ithaca, NY: Cornell University Press.
- Makris, M., Theodorou, M. and Middleton, N. (2011). Professional satisfaction in public general hospitals in Cyprus. *Nursing*, 49(1), 83-90.
- Maslow, A. and Lewis, K. J. (1987). Maslow's hierarchy of needs. *Salenger Incorporated*, 14, 987-195.
- McClelland, J. L. (2013). Incorporating rapid neocortical learning of new schema-consistent information into complementary learning systems theory. *Journal of Experimental Psychology: General*, 142(4), 1190-1199. https://doi.org/10.1037/a0033812
- McGregor, D. (1960). Theory X and theory Y. Organization *Theory*, 358(1), 374-293.
- McLeod, S. (2007). Maslow's hierarchy of needs. *Simply Psychology*, 1, 1-8.
- Mitchell, D. E., Ortiz, F. I. and Mitchell, T. K. (1987). Work orientation and job performance: The cultural basis of teaching rewards and incentives. SUNY Press.
- Murphy, L. R. (1995). Managing job stress: An employee assistance/human resource management partnership. *Personnel Review*, 24(1), 1995-1999. https://doi.org/10. 1108/00483489510079075
- Newman, K., Maylor, U. and Chansarkar, B. (2002). The nurse satisfaction, service quality and nurse retention chain. *Journal of Management in Medicine*, 15(2), 80-88. https://doi.org/10.1108/02689230210445095
- O'Leary, P., Wharton, N. and Quinlan, T. (2009). Job satisfaction of physicians in Russia. *International Journal of Health Care Quality Assurance*, 22(3), 221-231. https://doi.org/10.1108/09526860910953502

- Pantouvakis, A. and Mpogiatzidis, P. (2013). The impact of internal service quality and learning organization on clinical leaders' job satisfaction in hospital care services. *Leadership in Health Services*, 26(1), 34-49. https://doi.org/ 10.1108/17511871311291714
- Pelekas, E. and Antoniadis, A. (2012). Comparative study of medical and nursing staff satisfaction in two different sized hospitals in the region in Greece. *Archives of Greek Medicine*, 30(3), 325-334.
- Piko, B. F. (2006). Burnout, role conflict, job satisfaction and psychosocial health among Hungarian health care staff: A questionnaire survey. *International Journal of Nursing Studies*, 43(3), 311-318. https://doi.org/10.1016/j.ijnurstu. 2005.05.003
- Pillay, R. (2008). Work satisfaction of medical doctors in the South African private health sector. *Journal of Health Organization and Management*, 22(3), 254-268. https://doi.org/10.1108/14777260810883530
- Portigal, A. H. (1976). Towards the measurement of work satisfaction (No. 1). *Organization for Economic Co-operation and Development*.
- Raddaha, A. H. A., Alasad, J., Albikawi, Z. F., Batarseh, K. S., Realat, E. A., Saleh, A. A. and Froelicher, E. S. (2012). Jordanian nurses' job satisfaction and intention to quit. *Leadership in Health Services*, 25(43), 216-231. https://doi.org/10.1108/17511871211247651
- Riggio, R. E. (2017). *Introduction to industrial/organizational psychology*. Routledge. https://doi.org/10.4324/978131562 0589
- Roznowski, M. and Hulin, C. (1992). The scientific merit of valid measures of general constructs with special reference to job satisfaction and job withdrawal. In C. J. Cranny (Ed.), *Job satisfaction: How people feel about their jobs and how it affects their performance* (pp. 194-205).
- Savery, L. K. (2007). Job satisfaction and nurses. *Journal of Managerial Psychology*, 4(5), 11-16. https://doi.org/10.1108 /EUM0000000001727
- Spector, P. E. (1985). Measurement of human service staff satisfaction: Development of the job satisfaction survey. *American Journal of Community Psychology*, 13(6), 693-713. https://doi.org/10.1007/BF00929796
- Spector, P. E. (1997). Job satisfaction: Application, assessment, causes and consequences. Thousand Oaks, CA: SAGE. https://doi.org/10.4135/9781452231549
- Taber, J. M., Klein, W. M., Ferrer, R. A., Lewis, K. L., Biesecker, L. G. and Biesecker, B. B. (2015). Dispositional optimism and perceived risk interact to predict intentions to learn genome sequencing results. *Health Psychology*, 34(7), 718-728. https://doi.org/10.1037/hea0000159
- Taber, T. D. and Alliger, G. M. (1995). A task-level assessment of job satisfaction. *Journal of Organizational Behavior*, 16(2), 101-121. https://doi.org/10.1002/job.4030160202
- Taylor, F. W. (1997). *The principles of scientific management*. eBook Take Away.
- Theodorou, M. and Kaitelidou, D. (2007). Professional satisfaction of nursing and paramedical staff in a public general hospital. *Nursing*, 46(4), 537-544.

- Trigonis, E. (2014). Organizational culture and professional satisfaction of health professionals. The case of the General Hospital of Athens "Georgios Gennimatas". Cyprus: Diplomatic Thesis.
- Trivellas, P., Reklitis, P. and Platis, C. (2013). The effect of job related stress on employees' satisfaction: A survey in health care. *Procedia-Social and Behavioral Sciences*, 73, 718-726. https://doi.org/10.1016/j.sbspro.2013.02.110
- Tsounis, A. and Sarafis, P. (2018). Validity and reliability of the Greek translation of the job satisfaction survey (JSS). *BMC Psychology*, 6(27), 1-6. https://doi.org/10.1186/s40359-018-0241-4
- Van Eerde, W. and Thierry, H. (1996). Vroom's expectancy models and work-related criteria: A meta-analysis. *Journal* of Applied Psychology, 81(5), 575-584. https://doi.org/10. 1037/0021-9010.81.5.575

Vroom, V. H. (1964). Work and motivation. Wiley.

- Vroom, V. H. (1966). Organizational choice: A study of pre-and postdecision processes. Organizational Behavior and Human Performance, 1(2), 212-225. https://doi.org/10. 1016/0030-5073(66)90013-4
- Weisman, C. S. and Nathanson, C. A. (1985). Professional satisfaction and client outcomes: A comparative organizational analysis. *Medical Care*, 23(10), 1179-1192. https://doi.org/10.1097/00005650-198510000-00007
- Westover, J. H. and Taylor, J. (2010). International differences in job satisfaction. *International Journal of Productivity and Performance Management*, 59(8), 811-282. https://doi.org/ 10.1108/17410401011089481