



Facets of Motivation, Attitude, and Non-Physical Fatigue with Work Productivity in Colleges

Marianus Subandowo¹

ARTICLE INFO

ABSTRACT

Article History:

Received: 26 October 2021

Received in revised form: 28 April 2022

Accepted: 25 May 2022

DOI: 10.14689/ejer.2022.98.015

Keywords

Facets of motivation, attitude, non-physical fatigue, work productivity.

This study attempts to describe the features of motivation, attitudes, and non-physical weariness with work productivity in tertiary institutions. This research uses the content analysis method. Content analysis is a technique that academics can use to indirectly examine human behavior through communication such as textbooks, essays, newspapers, novels, magazine articles, music, advertising visuals, and all sorts of communication that can be analyzed. From the studies that have been done, it can be concluded: First, motivation variables greatly affect job satisfaction. Employees will be driven owing to various aspects, including an exciting and difficult job, an atmosphere that gives trust (trust), makes them personally responsible for

the results, and is involved in the organization's growth and development. Second, attitude is a statement or evaluative judgment regarding items, people, or events, and work attitudes might affect lecturers' performance in higher education. Third, tensions can injure the body. If this happens, there will be irreversible harm to the body, resulting in non-physical exhaustion. Fourth, lecturer work productivity is the achievement of all the lecturer's potential by utilizing the resources they have about time, quantity, and quality in carrying out their tasks carrying out the tri dharma of higher education.

© 2022 Ani Publishing Ltd. All rights reserved.

¹ Universitas PGRI Adi Buana, Surabaya, Indonesia. Email: subanindi@gmail.com. ORCID: 0000-0002-0308-6132

*Correspondent author: subanindi@gmail.com.

Introduction

As we enter a new period in the 21st century, the Indonesian higher education system must take on the following qualities. (1) related to student needs, national priorities, and economic development; (2) structured to provide opportunities for all citizens to develop their potential for life and contribute to society, nation, and state; (3) supported by adequate funding to enable innovation and excellence; (4) conducting research that can support national development; (5) having access to technology development and application; and (6) serving as a moral force I (Dalle et al., 2021). Therefore, universities must have a thorough institutional reputation. This system must be highly accountable to the community, operate efficiently, create graduates of high caliber, have transparent internal management, and adhere to norms.

Human resources are crucial to the success of enterprises (Aslam, 2022). If human resources' performance is enhanced, the organization's given duties will be completed with greater efficiency, effectiveness, or high quality (Dessler, 2015). The importance of human resources to a company's success cannot be overstated. According to Smith et al. (2016), human resources are a competitive advantage that can confront several obstacles. This is also corroborated by Soepeno and Handayani (2016), who assert that human resources play a crucial role and deciding a company's success.

Human resources are one of the most essential and fundamental aspects of an organization or business to enhance the framework for rejuvenating its strategy. Compared to other factors, human resources are the most significant and valuable assets necessary for the organization's other resources to operate effectively. Therefore, all production levels will grow when human resources are satisfied with their work (Maimako & Bambale, 2016). Therefore, to enable the utilization of human resources to create a competitive advantage, each employee must possess the skills or abilities necessary to do each job.

Workplace fatigue is a significant issue frequently experienced on the job. According to some academics, weariness can substantially impact the health of the workforce and decrease Productivity. Therefore, productivity is a mental attitude based on the premise that each day must be better than the previous one. Every business has the objective of increasing its workforce's Productivity. To attain high Productivity, business leaders must focus on workplace morale and discipline. Work productivity is influenced by several factors, including those related to the workforce as well as age, temperament, individual physical condition, fatigue, work motivation, physical conditions such as noise, lighting, rest time, length of work, wages, organizational structure, social environment, and family (Mulyadi et al., 2020). Work productivity is defined by Rizzo Cascio et al. (2020) as a measurement of output in the form of goods or services relative to inputs in the form of personnel, capital, materials, or raw materials and equipment.

If a person cannot overcome the stressor, their body will respond mentally and affect their physical health. Human labor requires specific maintenance and development because other production variables are meaningless without it. In light of Rhode Island Law No. 36 of 2009 about Health, there is a need for occupational health initiatives to safeguard workers so that they can enjoy a healthy life free from health concerns and detrimental impacts (RI, 2009).

Fatigue is one of the symptoms of work-related health problems that affect the workforce. Work-related fatigue is a common problem in the workforce. Fatigue at work is a serious issue that must be effectively addressed since it can lead to a variety of problems, such as a loss of efficiency at work, decreased productivity and work capacity, and the inability of Health and the body's ability to survive to contribute to workplace accidents. Fatigue is also a major contributor to workplace accidents and will reduce productivity (Verawaty et al., 2017).

Diverse explanations for labor productivity in development, such as the Human Development Index (HDI), have not yet demonstrated optimistic evidence. This clarifies the national index of labor productivity in Indonesia, which indicates that the productivity condition is subpar. Therefore, attempts to raise work productivity cannot be negotiated to improve Indonesia's national productivity ranking relative to prior years (Rejeki & Subandowo, 2019).

Ajzen and Fishbein (2005) established this association between health and production. Low worker productivity is also cited as the primary factor or cause of poverty, along with malnutrition, poor health, soft skills, low income, low savings, low investment, and low worker productivity (Pasaribu et al., 2015). Research on human resources indicates that investment in human capital has a major impact on productivity (Kartasasmita & Stern, 2014). In studies on productivity variables, it is also suggested that this increase in worker productivity can be supported by education and training and health improvement.

Regarding these research topics, this investigation aims to determine the relationship between motivation, attitudes, non-physical weariness and work productivity. This study also investigates the features of teaching staff and education in tertiary institutions about university production.

Literature Review

Steers et al. (2005) and Setiawan (2017) found that motivation is a crucial aspect that impacts a person's effectiveness in carrying out his responsibilities. Similarly, Alhassan and Nketiah-Amponsah (2016), Andjarwati (2015), and Sellier and Dahl (2015) identify three impulses, namely the accomplishment motive, the affiliation motive, and the power motive, as social motivation. Another study (McClelland, 1985) defined the factors influencing human behavior as social causes theory. This theory includes: (1) The need for achievement or need for achievement (nach) is the need to succeed by demonstrating higher mastery abilities, (2) The need for affiliation or need for collaboration (naff), which is the need for love and togetherness or belonging, the need to have friends from various backgrounds, and is accepted by Ling. a high social environment, and (3) The need for autonomy or need for autonomy (nab) is the need to succeed by demonstrating higher mastery abilities. (3) The desire for power or lack of energy (nop) includes the need to master one's work or manage others at work, the need to rule, and the need for autonomy, independence, and freedom.

Multiple research studies have demonstrated the positive effect or influence of the workplace on motivation and job performance (Andrews, 2009). Increasing the productivity of human resources generates the optimal work environment (Chavez et al., 2015). Various research studies have examined the effect of environmental work on motivation and job performance in various industrial sectors, including tourism and

hospitality (Pawirosumarto et al., 2017), creative industries (Chavez et al., 2015), industry mining (Mensah and Tawiah, 2016), the education sector (Khan et al., 2011), and the financial industry sector (Samson and Waiganjo, 2015).

Motivation is the need that compels a person to behave to achieve a particular objective. Motivation is derived from the word motive, which implies an individual's "impulse" or "stimulus" or "driving force." According to Kadir and Marnis (2014), motivation is the process that determines the intensity, direction, and persistence of an individual's effort toward achieving a goal. Based on this definition, motivation can be defined as the process of encouraging others to behave routinely. According to the preceding definition of motivation, there are three components: efforts, organizational goals, and needs. The effort component measures intensity. If an individual is motivated, they will attempt to replicate the past action. However, it is improbable that a high degree of effort will result in performance and yield positive results. If this effort is directed to benefit the organization, it will help the organization achieve its objectives. The preceding discussion demonstrates that an individual's motivation can emerge from within in the shape of an appreciation for the significance of their work's advantages. Motivation consists of three parts closely tied: needs, drives, and objectives. In the meantime, Weinhrice and Koontz (1993) said that motivation is an umbrella phrase for all types of desires, needs, and feelings of safety.

According to Kadir and Marnis (2014), an evaluation can be positive and negative towards items, people, or events. This expresses a person's feelings toward a. According to Kotler and Armstrong (2010), an individual's attitude evaluates feelings and tendencies toward a generally stable object. Attitude creates a disposition of liking or disliking toward, approaching, or avoiding something. According to Makmuri (2005), attitude is involved, which can be described as both positive and negative evaluations or evaluations of objects, people, or events.

Work weariness is a condition that can diminish workers' vitality and output on the job (Suma'mur, 2009). Work weariness in this study is characterized by a decrease in reaction time and sensations of fatigue. The brain regulates weariness centrally. The central nervous system has activation (sympathetic) and inhibition (parasympathetic) systems. Fatigue often refers to various situations that result in a loss of effectiveness and a decline in the body's endurance work capacity. The consequences of tiredness-causing situations accumulate in the body, resulting in sensations of fatigue. As is the case with physiological exhaustion, which results in physical workers who work physically ceasing their activities because they feel tired and even falling asleep due to fatigue, such degrees of fatigue might cause a person to cease functioning. According to Suma'mur (2009), fatigue is a collection of conditions accompanied by decreased efficiency and endurance at work, which can be caused by (a) eye-related fatigue, (b) general physical fatigue, (c) nervous exhaustion, (d) a monotonous environment, and (e) chronic environmental fatigue as a constant factor. Fatigue manifests itself differently in each individual but results in a loss of productivity, lower work capacity, and diminished endurance (Tarwaka, 2008). A worker who has worked for 6 to 8 hours will feel exhausted.

In contrast, non-physical errors might be described as false weariness, which emerges from a person's emotions and manifests in inconsistent conduct or opinions. His spirit is susceptible to change, including external situations and his health. Therefore, this involves alterations to a person's morale, as this fatigue can be caused by a variety of factors,

including a lack of interest in work, various diseases, environmental conditions, the existence of binding moral laws and a sense of inadequacy, and mental causes such as responsibility, anxiety, and conflict. This influence appears to accumulate and result in tiredness.

Under the viewpoint mentioned above, [Sedarmayanti \(2001\)](#) asserts that work productivity demonstrates that the individual is a comparison of the effectiveness of output (maximum performance attainment) with the efficiency of one input (labor), which includes quantity and quality within a given period. Work productivity is a measurement of a person's work or performance, with input processes serving as inputs and outputs serving as outputs; it is an indicator of employee performance for determining how to achieve high productivity in a company. Work productivity in this study refers to a performance appraisal, which is a methodical depiction of an individual or group about the strengths and weaknesses of a job as a type of evaluation for individuals about the implementation of their organization's goals ([Rizzo Cascio et al., 2020](#)).

Rather than this, people's resources are the engine of production. As agents of change in the development process, human resources require skills and knowledge to achieve high productivity. Employees of an organization or firm must raise their productivity based on the company's feedback to retain and bind them to the organization. An employee's job happiness will have a beneficial effect on the company, which will boost the company's productivity. Employees must pay close attention to their duties.

Method

The naturalistic-interpretive paradigm impacts qualitative research ([Cresswell et al., 2003](#)). To construct reality and comprehend its significance, the researcher pays great attention to processes, occurrences, and authenticity. This study employs the content analysis methodology. According to [Fraenkel and Wallen \(2006\)](#), content analysis is a technique that researchers can use to indirectly analyze human behavior by examining their communication, including textbooks, essays, newspapers, novels, magazine articles, music, and advertising pictures. It is analyzable.

[Guba and Lincoln \(2005\)](#) propose five fundamental content analysis principles. (1) the practice of adhering to the regulations. Each phase follows defined rules and procedures, (2) Content evaluation is a systematic process. This implies that, in the context of category construction, the entrance and exclusion of categories are governed by principles-compliant rules. (3) content analysis is a procedure designed to generalize; (4) content analysis questions the manifested content. Therefore, if a researcher intends to conclude, it must be supported by the contents of a document, (5) Content analysis can be quantitatively analyzed. However, this can also be accomplished through qualitative research.

[Fraenkel and Wallen \(2006\)](#) also provide the following description of the content analysis procedures: (1) The researcher determines the specific objectives to be attained; (2) defines key terms that must be explained in depth; (3) identifies the units to be analyzed; (4) searches for relevant data; (5) develops rational or conceptual relationships to explain how the data relates to the objectives; (6) plans to sample; and (7) develops category coding. After gathering as much information as possible regarding the features of the subject to be investigated, the researcher must develop the pertinent categories.

Research Findings

1. The motivational facet

According to Prabu et al. (2006), motivational variables strongly impact employee work satisfaction. This indicates that the greater the provided incentive factors, the greater the employee's job happiness. By allowing employees to learn everything about the company, one of the motivating employee aspects, namely the existence of trust, will create an atmosphere of mutual trust and a strong work team. Employees who are not informed of their progress experience mistrust and become less motivated.

According to Farida et al. (2016) and Akrim and Dalle (2021), increasing personal, organizational, and community life hinges job satisfaction. When employees are content, they will provide optimal job results and contribute to the pleasure of individuals, families, and communities. High discontent, on the other hand, will result in high turnover and absenteeism rates at work, as well as a decrease in life satisfaction and motivation to accomplish something constructive and productive. The employee job satisfaction element is vital to the organization due to employee satisfaction. It is hoped that in the future, it will further improve performance and have an impact on the company's overall productivity, or in-service management science known as "happy employee, happy customer," which means before satisfying customers, must first satisfy workers so that workers will be happy and sincere to provide optimal service for their customers (Muayyad & Gawi, 2016). Job satisfaction is an individual trait, and each person's level of job satisfaction varies according to his desires and the values he holds (Handoko, 2011).

According to Heim (2020), McClelland and Burnham (2017), social motivation itself is comprised of three motives: achievement, affiliation, and power. David McClelland further classifies motivation that affects human needs, known as social motives theory, as follows: a) The need for achievement (nach) is the need for success, to demonstrate a higher mastery ability; b) The need for affiliation (naff) is the need for love, togetherness (belonging), and association; the need to have friends from circles and be accepted in a high social environment; c) the need for power (need of p) is the need for control. When the social motivation aspect's signs are considered, the teacher's competency function profile is highly congruent. This social drive is a result of the stimulus. Cognitive and social motivation will significantly impact a person's success in fulfilling his responsibilities (Subandowo, 2012). In the case example in the workplace, which is equivalent to teacher performance based on the study's results, it is revealed that exciting tasks, not the quantity of the compensation for performing them, determine job performance.

According to Anita (2017), Laksmiari (2019), and Baiti et al. (2020), motivation has a large and favorable impact on work productivity. Furthermore, it is considered that giving both internal and external motivation will boost staff productivity.

It may be concluded from the preceding discussion that motivational factors substantially impact job satisfaction. Employees are typically motivated by several variables. One of them is a stimulating and difficult job, a trusting environment, personal accountability for results, and participation in the organisation's growth.

2. Attitude

Work Attitude is essential and an integral aspect of human existence. An individual's attitude is resilient, complex and variable in the workplace. [Furnham \(2012\)](#) states that social values and beliefs shape work attitudes. These values promote freedom, equality, love, and sacrifice, which are positively related and significant in the workplace; they are matters associated with a group's beliefs regarding particular objects and procedures.

According to [Suherman \(2017\)](#), an attitude is a declaration or evaluation of an object, person, or event. Integrating an attitude's behavioural components can be regarded as an intention to behave in a particular manner toward a person or thing. When a person has a positive work attitude, three characteristics emerge job happiness, job involvement, and organisational loyalty. When employees accept the organization's principles, they will experience job happiness, engage in work involvement, and commit to the organization.

An individual's work involved in an organization will reveal and reveal the extent and degree to which they are involved in the work, feels the drift in position (flow), finds enjoyment in sweat as if it were not limited by space or time, unites work and competence, and recognizes the significance of the job for his actualization and self-worth.

Individuals' job involvement to indicate their actualization and self-esteem will be the base that develops an individual's existence and partisanship in the organization, or it can be claimed that the individual is already dedicated to the organization. Such conditions will convince individuals that their organization is a place to organize the future, not merely a second home that gives a sense of security. Such settings will enable individuals to be intrinsically motivated (motivated) to do their best as their capacity and capability professionally to carry out their activities, roles, and responsibilities to deliver a quality-focused performance.

For this reason, transforming cultural values of work attitudes is crucial for establishing the academic environment in higher education so that excellence becomes an attainable objective.

[Sembiring \(2018\)](#) researched the effect of work attitudes and motivation on lecturer performance. The study's findings indicate that work attitudes and work motivation can significantly influence the improvement of lecturer performance and that work attitudes and work motivation jointly affect lecturer performance significantly.

Several studies, such as those ([Pitriyani & Halim, 2020](#)) who suggested that work attitudes and work skills affect work productivity, have also noted the association between attitude and work output. Work attitudes substantially impact work output ([Amodu et al., 2017](#)).

Based on the above explanation, it is possible to conclude that an attitude is a statement or evaluative judgment regarding objects, people, or events and that work attitudes can influence the performance of lecturers in higher education.

3. Non-Physical Fatigue

Workplace fatigue is a significant issue frequently experienced on the job. According to a number of academics, weariness can substantially impact employee health and productivity ([Atiqoh et al., 2014](#)). Activity-related fatigue is a regular occurrence in human existence. Muscle tiredness, exhaustion from stress or sadness, and fatigue caused by

specific disorders are all types of fatigue (Harring et al., 2007). Type of exercise, duration of the activity, workload, physical condition, physiological factors, and psychological variables all influence weariness. However, the association between stress and weariness is still unknown due to the lack of relevant studies.

If a person cannot resist the current stressor, the body will react psychologically and manifest physical effects (Gaol, 2016). Under stress, there will be a psychophysiological process in which the stressor is first processed on the mental level and subsequently on the physiological one. Stress-related physiological processes involve three systems: (1) the central and peripheral neurological systems, (2) the endocrine system, and (3) the immune system, all of which interact with and emit hormones that alter the body's physiological homeostasis. Each hormone can have direct, moderate, or protracted effects that prepare the body for the "Fight or Flight" response (Rosanti, 2014). In the meantime, according to Selye (1956), the body responds to chronic stress in three phases: (1) Alarm Reaction, which resembles a fight-or-flight response, (2) Resistant Phase, during which the body attempts to compensate for existing stress; and (3) Weariness Phase, during which the body is unable to correct for stresses owing to exhaustion. In this period, burnout and chronic fatigue syndrome arise.

According to research conducted by Setyowati et al. (2014), job stress, work conflicts, the physical environment, and work capacity directly affect weariness. According to Budiono (2008), fatigue is characterized by a weakening of the workforce in performing work or activities, leading to a rise in errors in doing work and its catastrophic outcomes, namely workplace accidents.

In 1966, Lazarus implemented several models that describe the mechanisms of stress and fatigue, including Walter Cannon's (1914) Fight or Flight response model, Selye (1984) General Adaptation Syndrome (GAS) model, and the physiological interactions between the nervous, endocrine, and nervous systems. Seaward's description of the immune system (2015). However, Hans Selye's GAS idea can explain how stress and fatigue are associated in this study. GAS consists of three phases, beginning with the Alarm Reaction, the body's initial response to being exposed to a stressor; this phase is analogous to Cannon's Fight or Flight response. The alterations in the body as an initial stress response are not permanent. If exposure to stressors persists, the body will lose its ability to resist, and energy will decline.

Because a person's energy is limited and can be depleted at any time, prolonged exposure to stimuli can injure the body. If this occurs, the body will sustain irreparable damage. Continuous resistance will continue to reduce the organism's energy until it can cause death (Romas & Sharma, 2017).

Less research has examined the elements that determine the link between stress and fatigue and the precise processes through which stress affects fatigue. Therefore, additional research is required regarding the causal relationship between stress and fatigue, its influencing elements, and the exact mechanisms behind this association. The findings revealed a substantial correlation between stress and weariness (Natanhia, 2019). In contrast, Verawati (2016)'s research reveals no correlation between employment tenure and subjective weariness. There is no correlation between dietary intake and emotional fatigue.

There is a correlation between subjective fatigue and performance. Fatigue at work is characterized by lower productivity and resiliency at work and work exhaustion will decrease performance and increase the number of work faults (Suma'mur, 2009). Fatigue at work is a performance-decreasing factor that might raise the error rate of work (Nurmianto, 1996). In addition, fatigue will substantially impact job outcomes and productivity.

It may be concluded from the preceding discussion that stressors can harm the body because a person's energy is limited and can run out at any time. If this occurs, the body will sustain irreparable damage. Job stress, work conflicts, physical surroundings, and work capacity all contribute to non-physical weariness. There is a correlation between stress and mental exhaustion.

4. Work Productivity

Work productivity of lecturers is intimately tied to their tasks and functions in the tri vium of higher education. Sinungan (2000) defines productivity as an interdisciplinary approach to identifying practical goals, formulating strategies, employing productive methods to use resources efficiently, and sustaining quality.

Only humans are capable of enhancing labor productivity. Humans can also contribute to waste and inefficiency in a variety of ways. Human factors, such as sleep issues, biological demands, and work tiredness, significantly impact the workforce's efficiency. It is also stated that work tiredness is primarily responsible for declining labor productivity in the field. Consequently, focusing on the human factor is a requirement of the total endeavor to boost work productivity.

Work productivity is the capacity to produce anything that stresses high-quality output through effective and efficient use of existing resources. Komariah and Engkoswara (2010) define work productivity as the ability to utilize resources to complete work tasks related to the quality of work results, quantity of work results, work effectiveness, and work efficiency, measured by comparing the results achieved and the resources used.

According to Hartatik (2014), the following are work productivity indicators: 1. Results of harvests Productivity has previously been defined as a person's ability to produce goods and services. According to this theory, when employee work productivity is low, the production of goods or services will naturally drop, and the production target will not be met. The quality of the product. Companies strive to produce high-quality goods during the manufacturing process. Because the final product is flawed, employee productivity will decline. 3. Error rate. The error rate is one of the causes of decreased employee productivity in product production. Due to the high error rate, production will be low. 4. necessary time Production process activities define sufficient time. If the time allocated to produce the product is insufficient, the production objective will not be reached.

Thus, it can be concluded that work productivity is the relationship between the number of products produced (output) and the amount of each resource required (input) with a more general formula, namely the ratio between satisfaction, needs, and sacrifices made, as well as a mental attitude that always holds the view that the quality of life today must be better than yesterday and tomorrow must be better than today.

Several researchers, including Johari and Jha (2020), concluded in their study that by improving workers' motivation, their productivity and chance of residing and working in one area increased significantly. According to additional research (Karimi & Asadnia, 2020), motivation might stimulate productivity. And productivity makes it possible to be creative at work (Hill, 2020).

Based on the research of work productivity theories, it can be concluded that lecturer work productivity is the attainment of all of the lecturer's potential by utilizing the time, quantity, and quality resources they have in carrying out their duties to fulfill the tri dharma of higher education.

Discussion

The primary purpose of this study is to demonstrate the existence of a correlation between motivation, attitude, and non-physical weariness and work productivity in higher education. Numerous variables can affect non-physical weariness. Workplace fatigue is a subjective emotion characterized by lower productivity and a desire to work (Verawati, 2016).

People are an organization's most valuable resource. Human resources contribute human resources, abilities, and innovative ideas to the organization. Regardless of the organization's financial and technological resources, achieving its objectives will be tough (Amka & Dalle, 2022; Muayyad & Gawi, 2016). Human resource management is a subset of organizational leadership that focuses on the human resource component. Its activities include planning, procurement, development, maintenance, and human resources to meet individual and organizational objectives. According to Sutrisno et al. (2010), one of the objectives of human resource management is to increase productivity, enhance the quality of work life, and persuade the business that it complies with legal requirements.

Motivation is a concept represented as needs and rewards, which cannot be separated because they are interconnected. Motivation refers to the conditions that launch a behavior or activity as the cause of action. Kadir and Marnis (2014) defines motivation as the readiness to exert great effort to pursue organizational goals, contingent on satisfying individual needs. Motivation originates through interactions between individuals and their environment. Work motivation is aimed at achieving goals, with a need, longing, or desire underlying the conduct. The market implies deficiencies, which can be addressed if the goals are met. Willingness and desire convey a strong feeling.

In the existence of motivation, internal and extrinsic motivations are distinguished. Extrinsic motivation is the motivation that occurs as a result of external circumstances, such as those related to economic variables (Newcomb, 1989; Siagian, 2003; Subandowo, 2012), such as salary, honoraria, or other incentives such as the desire for being promoted rapidly, to receive praise. And a positive impression, or vice versa, avoids reprimands and negative evaluations from superiors.

Fatigue is a problem in the workplace and is associated with worker safety and health. It has an impact on the health and safety of employees and coworkers. The term "fatigue" is commonly employed in occupational medicine. Fatigue is a multifaceted phenomenon

that has numerous causes. Therefore, it is difficult to find a complete definition that is universally accepted. In addition, the literature frequently uses sleepiness and drowsiness interchangeably with weariness. One of them is the feature of exhaustion, which is easier to define than fatigue. The first step in addressing tiredness complaints is differentiating between sleepiness and exhaustion. Even specialists may have difficulty distinguishing between them, although several sleep latency tests can help (Gander et al., 2007).

Gibson (1996) defines attitudes as good or negative feelings or mental states that are constantly prepared, examined, and regulated by experiences that profoundly affect a person's response to other people, objects, or events. Because attitudes are linked to perception, personality, and motivation, they are a greater predictor of behavior (Camiah, 1998). Employees will perform all required tasks with results proportional to the effort expended. Work attitudes contain a mental component that influences an individual's ability to respond to varied stimuli acquired via experience. Some respond favorably, while others respond badly.

Whether a business is engaged in producing goods or services, productivity is vital for its success. In general, productivity is the output-to-input ratio. Sufficient employee productivity will aid the company's efforts to expand its business. Increasing employee work productivity requires not just knowledge and abilities but also motivation. Increasing knowledge and skills has been the primary means of boosting productivity (Lestari, 2019).

Productivity is a mental attitude that strives to sustainably enhance the quality of life by enhancing efficiency, effectiveness, and quality (Dimas Okta, 2016). The level of savings in using inputs to produce goods or services is a measure of efficiency. Effectiveness is a measurement of the level of target achievement of a process of creating goods or services, both in terms of quantity and quality (Regulation of the Minister of Manpower and Transmigration of the Republic of Indonesia No. PER.21 / MEN / IX / 2009 on Guidelines for Productivity Services). Consequently, productivity is crucial since it significantly influences the success or failure of an organization. Therefore, productivity must be integral to formulating a corporate strategy, encompassing manufacturing, marketing, finance, and other areas (Subandowo, 2017).

According to a study (Umboh et al., 2020), work weariness is associated with productivity. The research findings on the relationship between fatigue and productivity are consistent with this finding. Indeed, fatigue can affect work performance and output (Nugroho, 2018). However, work tiredness can also have a variety of repercussions. According to Putri (2008), Rosanti (2014), and Subandowo (2012), there are two types of work fatigue: physical and general. Generally, workers who suffer from work tiredness complain of fatigue in their attitudes, orientations, and workplace changes (Setyowati et al., 2014). This broad exhaustion is commonly known as mental or nervous fatigue (Joint ILO/WHO Committee on Occupational Health). In the meantime, physical work weariness develops from extended muscle contraction, which prevents muscle processes and muscle fiber metabolism from producing the same work output or reduces the energy production in question, resulting in a loss in work productivity.

Conclusion

From the studies mentioned above and debates, we can conclude that: (1) the motivation element substantially impacts job satisfaction. Employees are typically

motivated by several variables. One of them is stimulating and difficult employment, an environment that fosters trust, personal accountability for results, and participation in the firm's growth. (2) An attitude is a statement or evaluative assessment about items, people, or events, and work attitudes can impact the performance of lecturers in higher education. Because a person's energy is limited and might deplete at any time, (3) stressors can harm the body. Job-related stress, work conflicts, the physical environment, and work capacity can cause irreversible damage to the body, manifesting as non-physical exhaustion. There is a relationship between stress and non-physical fatigue, and (4) lecturer work productivity is the realization of all the lecturer's potential by utilizing the resources they have in terms of time, quantity, and quality in carrying out their responsibilities to fulfill the tri dharma of higher education.

References

- Ajzen, I., & Fishbein, M. (2005). The Influence of Attitudes on Behavior. In *The handbook of attitudes*. (pp. 173-221). Lawrence Erlbaum Associates Publishers. <https://psycnet.apa.org/record/2005-04648-005>
- Akrim, A., & Dalle, J. (2021). Mobile Phone and Family Happiness, Mediating Role of Marital Communication: An Attachment Theory Perspective. *International Journal of Interactive Mobile Technologies (ijIM)*, 15(21), 107-118. <https://doi.org/10.3991/ijim.v15i21.17811>
- Alhassan, R. K., & Nketiah-Amponsah, E. (2016). Frontline staff motivation levels and health care quality in rural and urban primary health facilities: a baseline study in the Greater Accra and Western regions of Ghana. *Health economics review*, 6(1), 1-11. <https://doi.org/10.1186/s13561-016-0112-8>
- Amka, A., & Dalle, J. (2022). The Satisfaction of the Special Need Students with E-Learning Experience during COVID-19 Pandemic: A Case of Educational Institutions in Indonesia. *Contemporary Educational Technology*, 14(1), ep334. <https://doi.org/10.30935/cedtech/11371>
- Amodu, L., Alege, P., Oluwatobi, S., & Ekanem, T. (2017). The effect of human capital development on employees' attitude to work in insurance industry in Nigeria. *The Journal of Organizational Management Studies*, 12. <https://doi.org/10.5171/2017.494914>
- Andjarwati, T. (2015). Motivasi dari sudut pandang teori hirarki kebutuhan Maslow, teori dua faktor Herzberg, teori xy Mc Gregor, dan teori motivasi prestasi Mc Clelland. *JMM17: Jurnal Ilmu ekonomi dan manajemen*, 2(01). <https://doi.org/10.30996/jmm17.v2i01.422>
- Andrews, R. (2009). Organizational task environments and performance: an empirical analysis. *International Public Management Journal*, 12(1), 1-23. <https://doi.org/10.1080/10967490802646813>
- Anita, A. (2017). Pengaruh Motivasi, Insentif dan Promosi Jabatan Terhadap Produktivitas Kerja Karyawan pada Bagian Penjualan PT Kapuas Trio Tirta Sari Motor di Kuala Kapuas. *Jurnal Ilmiah Ekonomi Bisnis*, 3(3), 436-442. <https://doi.org/10.35972/jieb.v3i3.147>
- Aslam, S. (2022). *Instagram by the Numbers: Stats, Demographics & Fun Facts*. Omnicore Agency. <https://www.omnicoreagency.com/instagram-statistics/>
- Atiqoh, J., Wahyuni, I., & Lestantyo, D. (2014). Faktor-faktor yang berhubungan dengan kelelahan kerja pada pekerja konveksi bagian penjahitan di CV. Aneka Garment Gunungpati Semarang. *Jurnal Kesehatan Masyarakat (Undip)*, 2(2), 119-126. <https://doi.org/10.14710/jkm.v2i2.6386>

- Baiti, K. N., Djumali, D., & Kustiyah, E. (2020). Produktivitas Kerja Karyawan Ditinjau dari Motivasi, Disiplin Kerja dan Lingkungan pada PT. Iskandar Indah Printing Textile Surakarta. *Jurnal Ilmiah Edunomika*, 4(01), 69-87. <http://dx.doi.org/10.29040/jie.v4i01.812>
- Budiono, A. (2008). Keluarga Harmonis Indikator Menuju Sejahtera, (Februari 21, 2008 oleh Tabloid Jubi). Online <https://tabloidjubi.wordpress.com/2008/02/21/keluargaharmonis-indikator-menuju-sejahtera/> diakses tanggal 30 Januari 2017.
- Camiah, S. (1998). New skills required of nurse tutors in the UK: a study within two Project 2000 pilot schemes for pre-registration nursing courses. *Nurse education today*, 18(2), 93-100. [https://doi.org/10.1016/S0260-6917\(98\)80012-9](https://doi.org/10.1016/S0260-6917(98)80012-9)
- Chavez, B.C., Malabanan, E.S., Ramilo, J.A.R., Sarapat, H.A., Buluran, R.N. (2015). Effects of work environment to the health and productivity of the workers of IM digital Philippines, Inc. *Laguna Journal of Engineering and Computer Studies*, 3(1), 85-95.
- Creswell, J. W., Plano Clark, V. L., Gutmann, M. L., & Hanson, W. E. (2003). Advanced mixed methods research designs. In A. Tashakkori & C. Teddlie (Eds.), *Handbook of mixed methods in social and behavioral research* (pp. 209-240). Thousand Oaks, CA: Sage. http://in.sagepub.com/sites/default/files/upm-binaries/19291_Chapter_7.pdf
- Dalle, J., Raisinghani, M. S., Putra, A. P., Suriansyah, A., Hadi, S., & Sahara, B. (2021). A technology acceptance case of Indonesian senior school teachers: Effect of facilitating learning environment and learning through experimentation. *International Journal of Online Pedagogy and Course Design (IJOPCD)*, 11(4), 45-60. <http://doi.org/10.4018/IJOPCD.2021100104>
- Dessler, G. (2015). *Human Resources Management (Manajemen Sumber Daya Manusia)*. Edisi Bahasa Indonesia. Jakarta: Indeks.
- Dimas Okta, A. (2016). Pengaruh Komunikasi Terhadap Kinerja Karyawan Dengan Dimediasi Oleh Kepuasan Kerja (Studi Pada Bagian Produksi Pabrik Kertas PT. Setia Kawan Makmur Sejahtera Tulungagung). *Jurnal Bisnis dan Manajemen UNMER*, 3(1), 16-30. <https://dx.doi.org/10.26905/jbm.v3i1.70>
- Farida, S. I., Iqbal, M., & Kurniasih, A. (2016). Pengaruh Kepercayaan Dan Komitmen Organisasi Terhadap Motivasi Kerja Serta Implikasinya Pada Kepuasan Kerja. *Jurnal Kependidikan: Penelitian Inovasi Pembelajaran*, 46(1), 121-134. <https://dx.doi.org/10.21831/jk.v46i1.9576>
- Fraenkel, J. R., & Wallen, N. E. (2006). The Basic of Educational Research. In *How to design and evaluate resaerch in education with PowerWeb*.
- Furnham, A. (2012). Justice at Work. In S. C. Carr, M. MacLachlan, & A. Furnham (Eds.), *Humanitarian Work Psychology* (pp. 52-79). Palgrave Macmillan UK. https://doi.org/10.1057/9781137015228_3
- Gander, P., Purnell, H., Garden, A., & Woodward, A. (2007). Work patterns and fatigue-related risk among junior doctors. *Occupational and environmental medicine*, 64(11), 733-738. <http://dx.doi.org/10.1136/oem.2006.030916>
- Gaol, N. T. L. (2016). Teori stres: stimulus, respons, dan transaksional. *Buletin Psikologi*, 24(1), 1-11. <https://doi.org/10.22146/bpsi.11224>
- Gibson, G. (1996). An introduction to seismology. *Information Management & Computer Security*, 4(3), 20-25. <https://doi.org/10.1108/09685229610126959>
- Guba, E. G., & Lincoln, Y. S. (2005). Paradigmatic Controversies, Contradictions, and Emerging Confluences. In *The Sage handbook of qualitative research* (3rd ed., pp. 191-215). Sage Publications Ltd.

- Handoko, T. H. (2011). *Manajemen Personalia dan Sumber Daya Manusia*. Pengantar Manajemen.
- Harring, M., Rohlf, C., & Palentien, C. (2007). Perspektiven der Bildung – eine Einleitung in die Thematik. In *Perspektiven der Bildung* (pp. 7-14). Springer. https://doi.org/10.1007/978-3-531-90637-9_1
- Hartatik. (2014). *Mengembangkan SDM*. Jogjakarta: Laksana
- Heim, R. (2020). Motivation. In *Structural Durability: Methods and Concepts: Enabling Cost and Mass Efficient Products* (pp. 1-11). Springer International Publishing. https://doi.org/10.1007/978-3-030-48173-5_1
- Hill, K. Q. (2020). Research creativity and productivity in political science: a research agenda for understanding alternative career paths and attitudes toward professional work in the profession. *PS: Political Science & Politics*, 53(1), 79-83. <https://doi.org/10.1017/S1049096519001215>
- Johari, S., & Jha, K. N. (2020). Impact of work motivation on construction labor productivity. *Journal of management in engineering*, 36(5). [https://doi.org/10.1061/\(ASCE\)ME.1943-5479.0000824](https://doi.org/10.1061/(ASCE)ME.1943-5479.0000824)
- Joint ILO/WHO Committee on Occupational Health. (1986). *Psychosocial Factors at Work: Recognition and Control* (922105411X). International Labour Organisation. <https://digitallibrary.un.org/record/194660?ln=en>
- Kadir, A., & Marnis, d. M. (2014). Pengaruh Ability, Motivasi Dan Pengembangan Karir Terhadap Kinerja Karyawan Redaksi Pt Riau Pos Intermedia Pekanbaru. *Jurnal Ekonomi*, 22(2), 42-58. <http://dx.doi.org/10.31258/je.22.2.p.42-58>
- Karimi, M. N., & Asadnia, F. (2020). Applied linguistics researchers' possible selves as motivational resources guiding their research productivity. *Research in Post-Compulsory Education*, 25(2), 214-235. <https://doi.org/10.1080/13596748.2020.1742994>
- Khan, S.H., Azhar, Z., Parveen, S., Naeem, F., & Sohail, M.M. (2011). Exploring the impact of infrastructure, pay incentives, and workplace environment on employees performance (A case study of Sargodha University). *Asian Journal of Empirical Research*, 2(4), 118-140. <https://archive.aessweb.com/index.php/5004/article/view/2821>
- Komaridah, A., & Engkoswara. (2010). *Administrasi Pendidikan*. Bandung: Alfabeta
- Kotler, P., & Armstrong, G. (2010). *Principles of Marketing*, Prentice Hall
- Kartasasmita, G., & Stern, J. J. (2014). The Crisis: 1997-1999. In *Reinventing Indonesia* (pp. 85-106). World Scientific. https://doi.org/10.1142/9789814596565_0005
- Laksmiari, N. P. P. (2019). Pengaruh motivasi kerja terhadap produktivitas kerja karyawan pada perusahaan teh bunga teratai di Desa Patemon Kecamatan Serrit. *Jurnal Pendidikan Ekonomi Undiksha*, 11(1), 54-63. <https://doi.org/10.23887/jjpe.v11i1.20066>
- Lestari, A. W. (2019). Pengaruh Motivasi, Pelatihan, Lingkungan Kerja dan Upah terhadap Produktivitas Kerja Karyawan PT. Truba Jaya Engineering Bagian Mechanical di Kecamatan Air Sugihan Kabupaten OKI dengan Kepuasan Kerja sebagai Variabel Intervening. *Jurnal Intelektualita: Keislaman, Sosial dan Sains*, 8(1), 47-56. <https://doi.org/10.19109/intelektualita.v8i1.4228>
- Maimako, L. B., & Bambale, A. J. a. (2016). Human Resource Management Practices and Employee Job Satisfaction in Kano Stateowned Universities: A Conceptual Model. *Journal of Marketing & Management*, 7(2), 1-16.
- Makmuri, M. (2005). *Perilaku Organisasi*. Yogyakarta: Gadjah Mada University Press.
- McClelland, D. C. (1985). How motives, skills, and values determine what people do. *American psychologist*, 40(7), 812-825. <https://doi.org/10.1037/0003-066X.40.7.812>

- McClelland, D. C., & Burnham, D. H. (2017). Power is the great motivator. In *Leadership Perspectives* (pp. 271-279). Routledge. <https://www.taylorfrancis.com/chapters/edit/10.4324/9781315250601-20>
- Mensah, E.B.K., Tawiah, K.A. (2016). Employee motivation and work performance: a comparative study of mining companies in Ghana. *Journal of Industrial Engineering and Management*, 9(2), 255-309. <https://doi.org/10.3926/jiem.1530>
- Muayyad, D. M., & Gawi, A. I. O. (2016). Pengaruh kepuasan kerja terhadap produktivitas kerja pegawai bank syariah X kantor wilayah II. *Jurnal Manajemen dan Pemasaran Jasa*, 9(1), 75-98. <https://doi.org/10.25105/jmpj.v9i1.1396>
- Mulyadi, M., Sutrisno, S., Paeno, P., Harjianto, P., & Winata, H. (2020). Penyuluhan Manajemen Sumber Daya Manusia Untuk Pengembangan Karang Taruna Mekarsari Rumpin Bogor. *Jurnal Pengabdian Dharma Laksana*, 2(2), 142-146. <http://dx.doi.org/10.32493/j.pdl.v2i2.3984>
- Nathania, C. E. (2019). *Hubungan antara adversity quotient dengan burnout syndrome dalam penyusunan skripsi pada Mahasiswa Psikologi Universitas Islam Negeri Maulana Malik Ibrahim Malang*. (Undergraduate thesis). Universitas Islam Negeri Maulana Malik Ibrahim. <http://etheses.uin-malang.ac.id/id/eprint/15792>
- Newcomb, B. (1989). Market now ripe for ring-spun yarns. *Textile Horizons*, 9, 40-44.
- Nugroho, A. (2018). Analisis Produktivitas kerja karyawan outsourcing pada PT Siantar Putra Mandiri. *Jurnal Analisis Produktifitas*. <https://doi.org/10.31219/osf.io/7pxn8>
- Nurmianto, E. (1996). *Ergonomi Konsep Dasar dan Aplikasinya*. Surabaya: Prima Printing
- Pasaribu, R., Soetjipto, B., Widjaja, A., & Heruwasto, I. (2015). The Effect of Strategic Leadership Competences on Dynamic Capabilities and Firm Performance: An Empirical Evidence from MNCs' Manufacturing Subsidiaries in Indonesia. *SSRN Electronic Journal*. <https://dx.doi.org/10.2139/ssrn.2614317>
- Pawirosumarto, S., Sarjana, P.K., Gunawan, R. (2017). The effect of work environment, leadership style, and organizational culture towards job satisfaction and its implication towards employee performance in Parador Hotels and Resorts, Indonesia. *International Journal of Law and Management*, 59(6), 1337-1358. <https://doi.org/10.1108/IJLMA-10-2016-0085>
- Pitriyani, & Halim, A. (2020). Pengaruh Sikap Kerja dan Keterampilan Kerja Terhadap Produktivitas Kerja Karyawan Cv. Meranti Medan. *Ekonomi Bisnis Manajemen dan Akuntansi (EBMA)*, 1(2), 162-167. <https://doi.org/10.36987/ebma.v1i2.2163>
- Prabu, S. B., Karunamoorthy, L., Kathiresan, S., & Mohan, B. (2006). Influence of stirring speed and stirring time on distribution of particles in cast metal matrix composite. *Journal of materials processing technology*, 171(2), 268-273. <https://doi.org/10.1016/j.jmatprotec.2005.06.071>
- Putri, D. P. (2008). *Hubungan faktor internal kelelahan*. Universitas Indonesia.
- Rejeki, H. W., & Subandowo, M. (2019). Membangun Tingkah Laku Asertif Melalui Pengembangan Modul Teknik Soma Untuk Mencegah Dan Mengatasi Bullying. *Jurnal Education and Development*, 7(2), 241-247. <https://doi.org/10.37081/ed.v7i2.1007>
- RI, P. (2009). *Undang-undang RI No 36 Tahun 2009 tentang Kesehatan*. Financial Innovation. <https://peraturan.bpk.go.id/Home/Details/38778/uu-no-36-tahun-2009>
- Rizzo Cascio, J., Di Maio, F., Bianco, A., Ritondale, S., Cadei, L., Montini, M., Rinaldi, F., Zio, E., & Najafi, B. (2020). A hydrocarbon production system multi-objective optimization. *International Petroleum Technology Conference*. OnePetro. <https://doi.org/10.2523/IPTC-20061-Abstract>

- Romas, J., & Sharma, M. (2017). *Practical Stress Management: A Comprehensive Workbook*. Saint Louis: Elsevier Science
- Rosanti, E. (2014). *Perbedaan Tingkat Kelelahan Tenaga Kerja Yang Mengalami Kecemasan Akibat Kebisingan Pada Bagian Weaving, Rishing, Dan Administrasi Di Pt. Iskandar Indah Printing Textile Surakarta*. (Doctoral dissertation). UNS (Sebelas Maret University). <https://digilib.uns.ac.id/dokumen/detail/37569>
- Samson, G.N., Waiganjo, M. (2015). Effect of workplace environment on the performance of commercial banks employees in Nakuru Town. *International Journal of Managerial Studies and Research*, 3(12), 76-89. <http://thesisbank.jhia.ac.ke/id/eprint/1371>
- Sedarmayanti. (2001). *Sumber Daya Manusia dan Produktivitas Kerja*. Jakarta: Mandar Maju
- Sellier, A. L., & Dahl, D. W. (2015). The light side of creativity: An honesty mindset can boost creativity. *Advances in Consumer Research*, 43, 234-238. <http://www.acrwebsite.org/volumes/1020201/volumes/v43/NA-43>
- Selye H. (1984). *The Stress of Life*. New York: McGraw-Hill Book Company.
- Selye H. (1956). *The Stress of Life*. New York: McGraw-Hill Book Company.
- Sembiring, A. C. (2018). Meningkatkan Kepuasan Pelanggan dengan Mempertimbangkan Kualitas Layanan dan Harga. *Jurnal Ilmiah Teknik Industri Prima (JURITI PRIMA)*, 2(1), 22-28. <https://doi.org/10.5281/zenodo.1211891>
- Setiawan, A. H. (2017). Pengaruh Kemampuan dan Motivasi Kerja Terhadap Kinerja Karyawan Pada CV Sinar Agung. *Agora*, 5(2). <https://publication.petra.ac.id/index.php/manajemen-bisnis/article/view/6061/5560>
- Setyowati, D. L., Shaluhayah, Z., & Widjasena, B. (2014). Penyebab kelelahan kerja pada pekerja mebel. *Kesmas: Jurnal Kesehatan Masyarakat Nasional (National Public Health Journal)*, 8(8), 386-392. <http://dx.doi.org/10.21109/kesmas.v8i8.409>
- Siagian, S. P. (2003). *Teori dan praktek kepemimpinan*. Jakarta: Rineka Cipta.
- Sinungan, M. (1994). *Strategi Manajemen Bank Menghadapi Tahun 2000*. Jakarta: PT. Rineka Cipta.
- Smith, S. S., Peters, R., & Caldwell, C. (2016). Creating a culture of engagement-insights for application. *Business and Management Research*, 5(2), 70-80. <http://dx.doi.org/10.5430/bmr.v5n2p70>
- Soepeno, B., & Handayani, S. d. N. (2016). Penerapan Manajemen Sumber Daya Manusia dalam Meningkatkan Profesionalisme Guru Sejarah di MAN Pajajaran Kabupaten Probolinggo. *Jurnal Pendidikan dan Humaniora*, 53(1), 1-10. <http://repository.unej.ac.id/handle/123456789/80003>
- Steers, R. M., Mowday, R. T., & Shapiro, D. L. (2005). Response to "Meaningful Motivation for Work Motivation Theory". *Academy of Management Review*, 30(2), 238-238. <https://doi.org/10.5465/amr.2005.16387882>
- Suma'mur. (2009). *Hiegine Perusahaan dan Keselamatan Kerja*. Jakarta : CV. Sagung Seto.
- Subandowo, M. (2012). Pengaruh Deferensiasi Motivasi Sosial terhadap Perilaku Profesional Guru. *Jurnal Pendidikan dan Pembelajaran (JPP)*, 16(2), 149-161. <http://journal.um.ac.id/index.php/pendidikan-dan-pembelajaran/article/download/2829/578>
- Subandowo, M. (2017). Peradaban dan produktivitas dalam perspektif bonus demografi serta generasi Y dan Z. *SOSIOHUMANIKA: Jurnal Pendidikan Sains Sosial dan Kemanusiaan*, 10(2), 191-208. <https://doi.org/10.2121/sosiohumanika.v10i2.920>
- Suherman. (2017). Pola Mutasi, Reward & Punishment vs Fraud. *DJKN Articles*. <https://www.djkn.kemenkeu.go.id/artikel/baca/12542/Pola-Mutasi-Reward-Punishment-vs-Fraud.html>

- Sutrisno, E., Fatoni, A., & Nawawi, H. (2010). *Tantangan Sumber Daya Manusia*. Kencana Prenada Media Group. Jakarta. <http://repo.iain-tulungagung.ac.id/19187/4/BAB%20II.pdf>
- Tarwaka. (2008). *Kesehatan dan Keselamatan Kerja Manajemen dan Implementasi. K3 di Tempat Kerja*. Surakarta: Harapan Press.
- Umboh, D. I., Kawatu, P. A., & Ratag, B. T. (2020). Hubungan Antara Stres Kerja Dan Motivasi Kerja Dengan Produktivitas Kerja Pada Perawat Di Rsu Gmim Pancaran Kasih Manado. *Jurnal KESMAS*, 9(2), 15-20. <https://ejournal.unsrat.ac.id/index.php/kesmas/article/download/29009/28273>
- Verawati, L. (2016). Hubungan tingkat kelelahan subjektif dengan produktivitas pada tenaga kerja bagian pengemasan di cv sumber barokah. *The Indonesian Journal of Occupational Safety and Health*, 5(1), 51-60. <http://dx.doi.org/10.20473/ijosh.v5i1.2016.51-60>
- Verawaty, V., Ramdani, M. I., Laksmitawati, D. R., & Meidiawati, C. (2017). Analysis of Pharmaceutical Staffing Needs in the Pharmacy Installation of Grha Permata Ibu Hospital Depok 2016. *Journal of Management and Pharmacy Practice*, 7(2), 65-74. <https://doi.org/10.22146/jmpf.30124>
- Wehrich, H., & Koontz, H. (1993). *Management: A global perspective*. New York : McGraw-Hill.