

# Qualitative Literature Study: How Intrinsic Motivation Impacts Nurses' Job Satisfaction

#### Ho-Jin LEE1

Received: May 28, 2024. Revised: June 30, 2024. Accepted: June 30, 2024

#### **Abstract**

Purpose: The current study explores the impact of intrinsic motivation on nurses' job satisfaction, taking a close look at the current literature to answer what the relationship is between low/high intrinsic motivation and workplace productivity of nurses in their work at individual and collective levels. Data and methodology: The current research utilized a hybrid of descriptive and systematic review research designs. According to Huntington-Klein (2021), a research design refers to the researcher's method or approach. It includes a detailed explanation of the processes followed by identifying research variables, their evaluation, data collection and analysis. Results: A systematic literature review of the various sources (found in the reference section) revealed critical findings regarding the topic. The following are the four significant impacts of intrinsic motivation on nurses' job satisfaction: (1) Positive Attitude and Feeling, (2) Inherent Needs, (3) Productivity and Performance, and (4) Navigating Challenges of External Rewards. Conclusions: Therefore, the current study could conclude that intrinsic motivation is essential in enhancing the productivity of the nurses. Intrinsically driven or motivated nurses find it unnecessary to be supervised or pushed to work and achieve excellence. They would be proactive towards working and achieving the desired results.

Keywords: Intrinsic Motivation, Job Management, Nurse Work Environments

JEL Classification Code: D91, J54, O15

#### 1. Introduction

Intrinsic motivation is one of the most important aspects an employee requires to achieve the desired results at work. It refers to the self-drive to work and achieve desired results because of inherent motivating factors such as personal fulfillment by one's job satisfaction and enjoyment from a given job. It, therefore, implies that intrinsic motivation is devoid of any external or separable motivations such as rewards, salary increments or promotions at work. Intrinsic motivation at the fundamental level forms the basis for collective motivation and pulling together, commonly referred to as teamwork, which leads to resounding success in any workplace.

Intrinsic motivation is an essential element vis-à-vis the

satisfaction of nurses at their workplaces. According to Zeng et al. (2022), the healthcare workplace is one of the most challenging working environments in any setting. The above is because of the many dynamics, complexities, and challenges nurses face. They include strenuous duties, workplace pressure, and overworking in some healthcare settings (Smokrović, 2019). Therefore, extrinsic motivation is never enough to increase or maintain high job satisfaction among nurses in the workplace Apex (Apex-Apeh et al., 2020). Thus, the above reality underscores the integral part that intrinsic motivation plays in ensuring that nurses have the highest possible job satisfaction at workplaces.

The concept of intrinsic motivation as an essential factor for a nurse's job satisfaction is underpinned by notable theories and scholarly findings. One popular theory is the

<sup>1</sup> First and Corresponding Author. Assistant Professor, Department of Nursing, Yeungnam University College, South Korea. Email: hjlee257@naver.com

<sup>©</sup> Copyright: The Author(s)

This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (http://Creativecommons.org/licenses/by-nc/4.0/) which permits unrestricted noncommercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

self-determination theory by Richard Ryan. The SDT explains the concept of intrinsic motivation from the point of view of three key pillars: autonomy/ self-independence, closeness to others, and worker competence. For instance, it reiterates the need to fully control their actions and decisions as a critical source of self-motivation (Smokrović et al., 2019). Elsewhere, cognitive evaluation theory explains people's intrinsic motivation from the perspective of external factors. For example, it defines intrinsic definition as underpinned by rewards and feedback that an employee gets from their colleagues. The above and many more theories provide a solid basis for varied aspects of intrinsic motivation, such as its definition, its components/ pillars, and its importance and application such as its role in promoting employee job satisfaction (Aljumah, 2023). The above underscores the multidimensional and explicit nature of the topic and its importance across many application areas, notably in the nursing industry.

This study explores the impact of intrinsic motivation on nurses' job satisfaction. The study begins with a review of the literature. The review seeks to find other scholars' contributions and possible gaps to be filled for a robust understanding of the topic. Therefore, this paper's research and findings have focused on addressing the gaps and providing pertinent findings to explain the research questions. This research describes how intrinsic motivation impacts the nurses' motivation at work and the essence of the above. Additionally, the study seeks to increase the knowledge and understanding of critical aspects of business and management, such as the role of motivation in improving workers' productivity in line with contemporary trend of employee centrality in business success in the modern world. The findings of this research are helpful for multiple stakeholders, such as students, business stakeholders, and researchers.

Research Questions for this study are the below:

- 1. What is intrinsic motivation vis-à-vis employees and workplace productivity?
- 2. How does intrinsic motivation impact the nurses' motivation at the workplace?
- 3. What is the significance of intrinsic motivation in enhancing nurses' workplace productivity and value?
- 4. What is the relationship between low/high intrinsic motivation and workplace productivity of nurses in their work at individual and collective levels?
- 5. How does intrinsic motivation relate to extrinsic motivation, and how does the former affect or influence the latter vis-à-vis nurses' satisfaction at the workplace?

#### 2. Literature Review

Al Maqbali (2015), in research on the role of worker

motivation in improving workplace productivity, defined intrinsic motivation as the inherent or self-drive or urge of an employee to work and achieve their desired results or output devoid of any external motivations. According to Al Maqbali (2015), self-drive refers to inherent factors that influence any given employee to work, such as enjoyment, satisfaction, peace of mind, and contentment, which they derive from any given job. On the other hand, Lu, Zhao & While (2019) define intrinsic motivation as any driving force other than external and detachable factors that give an employee the desire to work and achieve some set goals and desires at work. They highlight external factors or consequences, such as rewards, promotions and salary increments, as elements that define extrinsic motivation. Therefore, according to Lu et al. (2019), whenever an employee's motivation is derived from factors other than the above, it is described as intrinsic motivation. The two definitions agree that intrinsic motivation is inherent and devoid of any external factors or influences such as those described above.

Lorber and Skela Savič (2012) explored the role of motivation in promoting employee resilience and the ability to face various workplace challenges. Their findings revealed critical details regarding the role and place of intrinsic motivation vis-à-vis enhancing employees' resilience when faced with multiple challenges. Per Lorber and Skela Savič (2012), intrinsic motivation is essential in giving employees the right attitude and mindset. For instance, the inherent motivation of enjoyment and satisfaction with one's work enables them to view their workplace positively. Therefore, they can quickly feel that such a workplace is a source of peace and strength instead of vice versa. Such a mentality creates a feeling of resilience and strength to tackle various challenges at work. For example, Sansoni et al., (2016) enable employees to acquire the necessary skills and ability to solve work-related challenges independently. The above promotes dedication at work, desirable output and job satisfaction.

The above findings are supported by Ernst et al. (2018), who revealed critical findings regarding the topic. According to Ernst et al. (2018), intrinsic motivation reflects an employee's multidimensional aspects. They include their attitude, self-motivation elements and even a person's personality. Therefore, whenever employees get the right level and type of intrinsic motivation, they can relate or have a favourable view of their work and job satisfaction (Atefi et al., 2019). for instance, an employee with a proper attitude and feeling that they have the correct skills and ability to work and that they enjoy their work easily finds a given work satisfying. Such employees enjoy increased confidence and the ability to get the best possible output (Andrioti et al., 2017). The above underscores intrinsic motivation's role in enhancing employee satisfaction at the

workplace.

Lee and Jung (2015) investigated the different theories and their implication regarding intrinsic motivation and its impact on healthcare workers. The scope of the research was narrowed to the nurses and psychiatrists vis-à-vis the above study aspects. The findings by the researchers revealed that the different pertinent theories to the topic provide critical theoretical underpinnings for explaining the various aspects of the topic. According to Lee and Jung (2015), the selfdetermination theory by Richard Ryan is a critical theory used to explain multifaceted elements of intrinsic motivation and its impact on the job satisfaction of healthcare workers. The self-determination theory describes intrinsic motivation from three points of view or perspectives. They include autonomy/independence, worker competence and proximity to other workers. Fila et al. (2020) support the above by arguing that they are critical pillars that influence or cause intrinsic satisfaction in people. According to Agustian et al. (2023), the distance or closeness to other workers could easily make one's intrinsic motivation higher or lower depending on the type of employee. On the other hand, one's feeling of autonomy impacts their levels of intrinsic motivation. Whenever employees feel they have enough autonomy, it influences their satisfaction, enjoyment and, ultimately, their intrinsic motivation.

Jena (2020), in similar research, explored the different theories used to explain the concept of intrinsic motivation and its impact on employees' job satisfaction. Cognitive Evaluation Theory explains the intrinsic motivation in people based on external motivating factors. According to Al Maqbali (2015), the cognitive evaluation theory explains that people's inherent motivations are pegged on their external motivations. Therefore, separating one's intrinsic motivation from external factors such as rewards and recognition is difficult. The findings are further supported by Aljumah (2023), who posits that external factors such as rewards, recognition and promotions of employees influence one's inherent and unseen aspects such as attitude and beliefs. Additionally, such external factors affect one's feelings, thus contributing to their inherent decisions and motivations. The above findings, however, contradict those of Smokrović et al. (2019), who argue that intrinsic motivation is defined by elements that do not fall under the purview of external motivation factors. As such, the above is a crucial aspect that researchers must clarify for more satisfying and adequate knowledge.

Apex-Apeh et al. (2020) researched the effects of intrinsic and extrinsic motivation on job satisfaction, employee retaining and the performance of workers. Their findings revealed that motivation, regardless of the type, fosters a positive attitude, willingness to work and results. Therefore, to achieve better results, it is incumbent upon the managers to ensure that they motivate their employees

significantly (Al Maqbali, 2015). The above is supported by Aljumah (2023), who explains that motivation aligns with contemporary business management trends, such as employee centrality. According to Lee and Jung (2015), employee centrality refers to adequate attention and efforts towards ensuring that the affairs of the employees are well taken care of (Smokrović et al., 2019). Essentially, employee centrality refers to the intention and efforts towards ensuring that employees are satisfied and motivated. It, therefore, depicts a significant relevancy and pertinency to the research topic here.

According to Apex-Apeh et al. (2020), employees' intrinsic motivation is the most important because it is inherent and is not induced by external factors (Ernst et al., 2018). therefore, according to Ernst et al. (2018), it holds much weight and significance because it describes critical hidden but powerful aspects regarding employees, such as attitudes, beliefs and feelings. Therefore, Andrioti et al. (2017) advocate for managers and employers to ensure that despite their employees' extrinsic motivation, their intrinsic motivation remains at the top at all times.

Siedlecki (2020), in research similar to Andrioti et al. (2017), explains the factors that reduce employees' intrinsic motivation. One such factor is reducing or doing away with the external rewards. Additionally, if one's satisfaction reduces because of the poor working environment that is no longer enjoyable or lack of peace of mind, it quickly leads to poor intrinsic motivation (Smokrović et al., 2019). The above assertions are similar to those by Andrioti et al. (2017), who argue that intrinsic motivation is related to extrinsic motivation. They explain that a reduction in inherent motivation points to a problem with the extrinsic motivation factors. The above, in turn, affects an employee's behaviors and actions. The writers advocate for healthcare leaders to strive to create proper extrinsic motivation that ultimately influences intrinsic motivation. The above findings reiterate that despite intrinsic motivation from within, it is highly influenced by external factors.

The above findings by various writers explain multidimensional aspects regarding the topic. Many of the writers above have researched intrinsic motivation vis-à-vis general aspects such as employees' satisfaction, work output and value of production. Few researchers have focused explicitly on the impact of intrinsic motivation on nurses' job satisfaction. Additionally, many of the researchers on the topic have focused on healthcare workers as a generalization as opposed to focusing on the nurses only. Elsewhere, many researchers have focused on the impact or effect of intrinsic motivation on employee management and the choice of strategies.

This researcher, therefore, seeks to fill the above research gap by focusing on the topic, i.e., intrinsic motivation and its impact on the nurses' job satisfaction.

This research is unique because it is based on thoroughly analyzing many sources to arrive at comprehensive and reliable findings. Therefore, the findings of this research are highly dependable and applicable, and most importantly, they fill the above-identified research gap. Thus, the findings would contribute to the knowledge and usefulness of the topic to the various stakeholders.

Table 1: Research Gap

Summary of Research Gap	Supporting Previous Works
The above findings by various writers explain multidimensional aspects regarding the topic. Many of the writers above have researched intrinsic motivation vis-à-vis general aspects such as employees' satisfaction, work output and value of production. Few researchers have focused explicitly on the impact of intrinsic motivation on nurses' job satisfaction.	Al Maqbali (2015), Lu et al. (2019), Lorber and Skela Savič (2012), Sansoni et al., (2016), Ernst et al. (2018), Atefi et al. (2019), Andrioti et al. (2017), Lee and Jung (2015), Fila et al. (2020) Agustian et al. (2023), Jena (2020), Al Maqbali (2015), Aljumah (2023), Smokrović et al. (2019), Apex-Apeh et al. (2020), Ernst et al. (2018), Andrioti et al. (2017)

#### 3. Methodology

This section explains the approach, i.e., methods, research design, and approach to analyzing data/information used in this research. This section aims to describe the exact methodologies for the replication of such a study in future or for reviewing and ascertaining the reliability and effectiveness of the research findings by reviewers and readers.

#### 3.1. Research Design

This research utilized a hybrid of descriptive and systematic review research designs. According to Huntington-Klein (2021), a research design refers to the researcher's method or approach. It includes a detailed explanation of the processes followed by identifying research variables, their evaluation, data collection and analysis. The above, when explained explicitly, helps in promoting the replicability of similar research, enhancing such research or enabling a review to ensure that the credibility, reliability and effectiveness of such research are ascertained by critical stakeholders such as peer reviewers (König et al., 2022).

The descriptive research design enabled the researchers to explain explicitly the findings and the topic. Essentially, the design or approach enabled the researcher to answer vital questions such as why, how and when. Notably, the descriptive research design enabled the researcher to answer vital questions such as the impacts of intrinsic motivation on

nurses' job satisfaction and how the latter affects how nurses are satisfied with their work. On the other hand, a systematic review design was critical because it ensured that the researcher could examine various literature in an organized and standardized manner (Siedlecki, 2020). such a review was vital in ensuring that the researcher organized pertinent data collected courtesy of comprehensive assessments of the various identified sources.

#### 3.2. Research Data

The researcher did not have people as the research population, typical of many studies. Instead, the researcher relied primarily on other sources by other writers.

#### 3.2.1. Sampling and Criteria of Inclusion

The researcher broadly used a non-probability sampling approach. This implies that the researcher deliberately picked the sources to be reviewed based on some defined criteria such as availability, cost, and relevance to the topic. Specifically, the researcher used a convenience sampling technique based on the primary considerations of availability and accessibility of the sources to be reviewed (Nantharath et al., 2016; Kang & Hwang, 2020).

The research had a defined budget, and therefore, they could only review the sources that were available and easily accessible as defined by the available resources and platforms (of the books both online and offline) for the researcher. The inclusion criteria for the sources used were simple: the researcher only needed sources with relevant content to the topic and less than eight years old. The above was deliberate to ensure that all the sources used were appropriate and valuable. The screening process factored the above criteria in multiple phases. The research began with a big pool and was narrowed down to a small and relevant size that was vital in arriving at the findings (Phommahaxay et al., 2019; Kim & Kang, 2022).

#### 3.2.2. Data Collection and Tools

The researcher collected data using laptops, physical notebooks, and computers. Specifically, the researcher collected data by reading, analyzing, and noting notes, findings, and conclusions using the above tools (Nguyen et al., 2022; Kang, 2023).

#### 3.2.3. Data Analysis

The researcher analyzed data using the text analysis approach. The researcher extracted textual data from the various textbooks and sources identified. The approach meant that the researcher had to uncover critical and fundamental elements such as topical findings, trends in the

findings and various emerging issues on the topic. The research then organized the findings into multiple categories for sufficient further analysis and conclusions, as highlighted in the findings and discussions section. It is sufficient to state that the researcher utilized the preferred reporting items for systematic reviews and meta-analyses to analyze and report the findings.

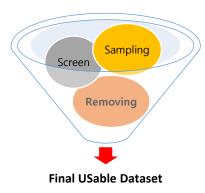


Figure 1: Data Collecting Procedure

#### 4. Results

A systematic review of the various sources (found in the reference section) revealed critical findings regarding the topic. The following are the four significant impacts of intrinsic motivation on nurses' job satisfaction.

# 4.1. Intrinsic Motivation Inculcates a Positive Attitude and Feeling Towards Work, Which are Critical for Increased Job Satisfaction Among Nurses

Intrinsic motivation is important because it induces a positive attitude and feeling towards work for the nurses. According to Smokrović et al. (2019), intrinsic motivation is important because it is an expression or sign of satisfaction, enjoyment or fulfilment by the employees vis-a-vis their work. The above positive attributes significantly impact the nurses' attitudes and perceptions towards work (Aljumah, 2023). Per Lu et al. (2019), nurses can easily navigate the various work challenges whenever they enjoy their work and feel fulfilled. For example, they can navigate strenuous duties, being overworked and the demanding nature of the work (Sansoni et al., 2016).

As such, a positive attitude towards work and a good well-being are essential. The above is further supported by Atefi et al. (2019), who argue that intrinsic motivation causes a good attitude, feeling and mood in nurses towards work, thus increasing job satisfaction at work. Elsewhere, Lee and

Jung (2015) argue that a lack of intrinsic motivation could easily lead to nurses' negative attitudes and hatred of work, leading to low job satisfaction whenever they face various challenges at work.

# 4.2. Intrinsic Motivation Meets the Inherent Needs of Nurses that are Unique and Critically Affect One's Job Satisfaction

Per Agustian et al. (2023), intrinsic motivation refers to the inherent pleasure, enjoyment or drive that nurses have to work other than the external motivations or factors such as rewards. Additionally, Siedlecki (2020) explains that autonomy and competence are key pillars of intrinsic motivation according to the self-determination theory. Zeng et al. (2022) reveal that when nurses feel competent enough and can deliver on their own with minimum supervision assistance, it undoubtedly gives them intrinsic motivation. Competency also leads to various personal and unique feelings, such as growth, individual ability betterment and development of a person's capabilities (Smokrović et al., 2019). The above, in turn, promotes enjoyment and contentment with one's work, i.e., job satisfaction.

Apex-Apeh et al. (2023) reveal findings similar to those of Agustian et al. (2023) by asserting that intrinsic motivation makes nurses derive value through their input. For instance, according to Al Magbali (2015), many nurses take pride in outstanding contributions, such as saving lives courtesy of intrinsic motivation and drive coupled with extrinsic motivation, such as rewards and promotions, due to their incredible work. Therefore, intrinsic motivation plays a crucial role in promoting nurses' satisfaction with their jobs whenever they realize their impact on society (Fila et al., 2020). Essentially, according to Agustian et al. (2023), intrinsic motivation drives nurses to achieve hidden pleasures and aspirations such as those described above, which intrinsically satisfies nurses regarding their job and reward them with extrinsic motivational factors such as increased paychecks.

### 4.3. Intrinsic Motivation Increases the Nurses' Productivity and Performance at Work

Per Lorber and Skela Savič (2012), the intrinsic motivation of nurses means that a nurse has an inherent drive instead of external drives. Some nurses work purposely because of a passion or a calling instead of merely working to earn a living. According to Al Maqbali (2015). such nurses are driven by intrinsic motivation. Therefore, they easily derive high contentment, enjoyment and peace of mind in such a work. It improves when such employees enhance their relationship with other workers and enjoy working independently and with greater competency, as underpinned

by the self-determination theory. Per Lorber and Skela Savič (2012), the above increases their intrinsic motivation, leading to better output or productivity, enjoyment of their work and fulfilment at work, which leads to significant job satisfaction.

## 4.4. Intrinsic Motivation Enables Nurses to Navigate Challenges of External Rewards and their Impact on Job Satisfaction.

According to Lu et al. (2019), intrinsic motivation is inherent and not influenced by external factors. Thus, it helps to complement the weaknesses and challenges caused by a lack of, insufficient or the existence of external rewards (Apex-Apeh et al., 2020). Per Aljumah (2023), external rewards could have a negative effect, such as disagreements among some nurses. For example, nurses rewarded based purely on output increase could discourage others who pride themselves in being dedicated to their work regardless of their performance. On the other hand, a lack of external rewards, such as promotions and salary increments due to the existing financial challenges in a given healthcare organization, could lead to demotivated staff in the absence of intrinsic motivating factors (Smokrović et al., 2019).

Therefore, according to Jena (2020), intrinsic motivation leads to a self-drive and inherent feeling of contentment, happiness and satisfaction by a nurse with their work. Therefore, intrinsic motivation complements or substitutes extrinsic motivation, ensuring that employees remain content and feel fulfilled with their jobs irrespective of whether an external reward is there or not. Per Lu et al. (2019), intrinsic motivation ensures that employees have favourable attitudes, perspectives, and feelings even without external rewards. It, therefore, keeps the nurses focused, and ultimately, they can deliver excellently, leading to success, feelings of contentment and general satisfaction with their job regardless of whether external motivations or rewards exist.

Table 2: Findings of the Research

Results	Main Point
Positive Attitude     and Feeling	Intrinsic motivation causes a good attitude, feeling and mood in nurses towards work, thus increasing job satisfaction at work.
2. Inherent Needs,	Intrinsic motivation plays a crucial role in promoting nurses' satisfaction with their jobs whenever they realize their impact on society.
Productivity and     Performance	Motivated nurses enhance their relationship with other workers and enjoy working independently and with

	greater competency, as underpinned by the self-determination theory.
4. Navigating Challenges of External Rewards	Intrinsic motivation is inherent and not influenced by external factors. Thus, it helps to complement the weaknesses and challenges caused by a lack of, insufficient or the existence of external rewards.

#### 5. Discussions

The above findings reveal pertinent and explicit details on how intrinsic motivation ensures satisfaction with their job. First, inherent motivation influences the nurses' attitudes and perspectives towards work. Courtesy of intrinsic motivation, employees can get favourable attitudes and perceptions about their work (Zeng et al., 2022). For example, they can readily appreciate their work as a calling and need to work to achieve nobler objectives, such as saving lives, instead of focusing on payments (Aljumah, 2023). Such positive attitudes and perspectives promote nurses' resiliency against challenges such as strenuous duties and poor payments by some employers (Ernst et al., 2018). With a proper attitude, nurses can efficiently work out of self-drive and remain dedicated to achieving their best. Whenever nurses achieve inherent satisfaction like those highlighted above, they easily derive significant job satisfaction and contentment with work regardless of the circumstances and challenges.

Intrinsic motivation is essential in enhancing the productivity of the nurses. Intrinsically driven or motivated nurses find it unnecessary to be supervised or pushed to work and achieve excellence. They would be proactive towards working and achieving the desired results (Al Maqbali, 2015). For example, nurses with intrinsic motivation would find it appropriate to report on duty easily and take on external duties even when not instructed. The above and other extra miles lead to recognition and increased output at work. In turn, it promotes the ability to be recognized and rewarded with external rewards such as promotions and increased paychecks (Lu et al., 2019). Such nurses can then easily derive satisfaction with their jobs characterized by excellence, feeling of fulfillment, enjoyment and external rewards resulting from intrinsic motivation.

Elsewhere, intrinsic motivation enables nurses and their employers to navigate the challenges of extrinsic motivation. Sometimes, extrinsic motivations such as promotions, increased payments, or salaries may not be within the employer's reach. In such cases, the nurses would easily struggle to thrive without intrinsic motivation.

Therefore, inherent motivation complements or fills the place of extrinsic motivation nicely. It ensures they remain motivated and content with their work for other reasons, such as viewing it as a hobby, passion, or a calling. Thus, nurses can easily give their best and achieve excellence in service delivery, satisfying their jobs without significant external rewards.

The above findings depict employee centrality as a vital trend in the future. Employers in the medical field need to ensure that nurses have the utmost intrinsic motivation to derive the highest possible satisfaction with their jobs. It is sufficient to state that nursing is a job with various challenges, such as being demanding, strenuous, and having long shifts. Therefore, it is incumbent upon the various stakeholders such as healthcare employers and managers to foster the highest possible levels of intrinsic motivation among the nurses. As discussed above, it would enable the nurses to have the utmost job satisfaction. In turn, it would promote the delivery of increased results/ outputs in the medical industry. Therefore, the findings reiterate the need for stakeholders to focus on emerging trends, such as employee centrality and employee motivation, which will define future trends in an ever-increasing competitive world.

#### References

- Agustian, K., Pohan, A., Zen, A., Wiwin, W., & Malik, A. J. (2023). Human Resource Management Strategies in Achieving Competitive Advantage in Business Administration. *Journal of Contemporary Administration and Management*, 1(2), 108-117.
- Al Maqbali, M. A. (2015). Factors that influence nurses' job satisfaction: a literature review. *Nursing Management*, 22(2), 30-37.
- Aljumah, A. (2023). The impact of extrinsic and intrinsic motivation on job satisfaction: The mediating role of transactional leadership. Cogent Business & Management, 10(3), 2270813.
- Andrioti, D., Skitsou, A., Karlsson, L. E., Pandouris, C., Krassias, A., & Charalambous, G. (2017). Job satisfaction of nurses in various clinical practices. *International Journal of Caring Sciences*, 10(1), 76-87.
- Apex-Apeh, C. O., Ujoatuonu, I. V., Ugwu, J. I., & Olowu, C. T. (2020). Motivation and work environment as predictors of job performance among nurses. *Nigerian Journal of Psychological Research*, 16(1), 65-72.
- Atefi, N., Abdullah, K. L., Wong, L. P., & Mazlom, R. (2019). Factors influencing registered nurses perception of their overall job satisfaction: a qualitative study. *International* nursing review, 61(3), 352-360.
- Ernst, M. E., Franco, M., Messmer, P. R., & Gonzalez, J. L. (2018). Nurses' job satisfaction, stress, and recognition in a pediatric setting. *Pediatric Nursing*, 30(3), 219-228.
- Fila, M., Levicky, M., Mura, L., Maros, M., & Korenkova, M. (2020). Innovations for business management: Motivation and barriers. Marketing and Management of Innovations, 4, 266-

- 278.
- Huntington-Klein, N. (2021). The effect: An introduction to research design and causality. Chapman and Hall/CRC.
- Jena, R. K. (2020). Measuring the impact of business management Student's attitude towards entrepreneurship education on entrepreneurial intention: A case study. *Computers in Human Behavior*, 107, 106275.
- Kang, E. (2023). The Key Historical Factors of Small and Medium-Sized Enterprises (SMEs) for Economic Growth in the Republic of Korea. *Journal of Koreanology Reviews* 2(2), 9-17
- Kang, E., & Hwang, H. J. (2020). The consequences of data fabrication and falsification among researchers. *Journal of Research and Publication Ethics*, 1(2), 7-10.
- Kim, J. H., & Kang, E. (2022). The Role of Wearable Devices for the Success of the Healthcare Business: Verification from PRISMA Approach. *Journal of Economics Marketing, and Management*, 10(4), 13-24.
- König, J., Santagata, R., Scheiner, T., Adleff, A. K., Yang, X., & Kaiser, G. (2022). Teacher noticing: A systematic literature review of conceptualizations, research designs, and findings on learning to see. *Educational Research Review*, 36, 100453.
- Lee, M. K., & Jung, D. Y. (2015). A study of nursing tasks, nurses' job stress and job satisfaction in hospitals with no guardians. *Journal of Korean Academy of Nursing Administration*, 21(3), 287-296.
- Lorber, M., & Skela Savič, B. (2012). Job satisfaction of nurses and identifying factors of job satisfaction in Slovenian Hospitals. Croatian Medical Journal, 53(3), 263-270.
- Lu, H., Zhao, Y., & While, A. (2019). Job satisfaction among hospital nurses: A literature review. *International journal of nursing studies*, 94, 21-31.
- Nantharath, P., Kang, E. G., & Hwang, H. J. (2016). Investment Analysis in the Hydroelectric Power Sector of the Lao People's Democratic Republic (Lao PDR). *Journal of Distribution Science*, 14(8), 5-8.
- Nguyen, L. T., Nantharath, P., & Kang, E. (2022). The sustainable care model for an ageing population in vietnam: evidence from a systematic review. Sustainability, 14(5), 2518.
- Phommahaxay, S., Kamnuansipla, P., Draper, J., Nantharath, P., & Kang, E. (2019). Preparedness of Lao People's Democratic Republic to Implement ASEAN Common Visa (ACV). *Research in World Economy*, 10(3), 419-430.
- Sansoni, J., DE CARO, W., Marucci, A. N. N. A., Sorrentino, M., Mayner, L., & Lancia, L. (2016). Nurses' Job satisfaction: an Italian study. ANNALI DI IGIENE MEDICINA PREVENTIVA E DI COMUNITÀ, 28(1), 58-69.
- Siedlecki, S. L. (2020). Understanding descriptive research designs and methods. *Clinical Nurse Specialist*, 34(1), 8-12.
- Smokrović, E., Gusar, I., Hnatešen, D., Bačkov, K., Bajan, A., Gvozdanović, Z., ... & Žvanut, B. (2019). Influence of work motivation, work environment and job satisfaction on turnover intention of Croatian Nurses: a qualitative Study. Southeastern European Medical Journal: SEEMEDJ, 3(2), 33-44.
- Smokrović, E., Žvanut, M. F., Bajan, A., Radić, R., & Žvanut, B. (2019). The effect of job satisfaction, absenteeism, and personal motivation on job quitting. *Journal of East European Management Studies*, 24(3), 398-422.
- Zeng, D., Takada, N., Hara, Y., Sugiyama, S., Ito, Y., Nihei, Y., &

Asakura, K. (2022). Impact of intrinsic and extrinsic motivation on work engagement: a cross-sectional study of nurses working in long-term care facilities. *International journal of environmental research and public health, 19*(3), 1284.