



## The powerless intrinsic and extrinsic work motivation to affect grit and the innovative work behavior in educational context

*Mary Joy Encarnacion*: Senior Instructor, School of Business and Accountancy, Divine Word College of Vigan.

*Theogenia M. Magallanes*: President, Saint Benedict College of Northern Luzon, Ilocos Sur, Philippines

*Jecel M. Mansueto*: Saint Benedict College of Northern Luzon, Ilocos Sur, Philippines

*Mary Micah K. Sallong*: Saint Benedict College of Northern Luzon, Ilocos Sur, Philippines.

*Gaudette Marie Talozza*: Saint Benedict College of Northern Luzon, Ilocos Sur, Philippines.

*Antonio Prado*: Saint Benedict College of Northern Luzon, Ilocos Sur, Philippines.

### ARTICLE INFO

Article history:

Received: September 05, 2025

Received in rev. form. October 20, 2025

Accepted: November 10, 2025

Published: December 15, 2025

**Keywords:** *Intrinsic work motivation, extrinsic work motivation, grit, innovative work behavior.*

### ABSTRACT

The study aimed to examine the effect of individual work motivation on the employees' grit and innovative work behavior. To deepen the theories of the study, the literature was reviewed. The study used a descriptive assessment and correlational research design. The population of the study was all the employees of the Divine Word College of Loag. The data was gathered through research questionnaires. The study found that both intrinsic and extrinsic work motivation were not associated with employees' grit and innovative work behavior. Therefore, the hypothesis of the study is rejected. Another study should be conducted to include a broader population and take into account the contextual factors like organizational culture and leadership that might influence grit and innovative work behavior.

© 2025 by the authors. Licensee DWIJMH. This open-access article is distributed under the terms and conditions of the [Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License](https://creativecommons.org/licenses/by-nc-sa/4.0/) (<https://creativecommons.org/licenses/by-nc-sa/4.0/>)

JEL Classification: M12

## Introduction

The success of any organization ultimately depends on the effort of its employees—and that effort is largely shaped by their level of motivation. Employees draw motivation from both internal and external sources, and these factors directly influence how well they perform. Some individuals are driven by genuine enjoyment and

fulfillment in their work, while others are motivated primarily by financial incentives or external rewards. Whether motivation is high or low—intrinsic or extrinsic—it reflects how personal satisfaction and external benefits shape one's work output. In turn, levels of motivation influence engagement, focus, and productivity, resulting in either efficiency or deficiencies in performance (Arnold et al., 2017; Diebig et al., 2017; Arda & Yildiz, 2019).

Given this, it is clear that employee motivation should be a priority when managing organizational performance. Both intrinsic and extrinsic motivation can lead to high performance—or cause underperformance if neglected. For this reason, organizations seeking to enhance overall productivity must first understand and address what motivates or demotivates their workforce. Numerous studies highlight the importance of both motivation types in shaping employee performance (Alkhalifa et al., 2024; Elamalki et al., 2024; Kleinbeck, 1987; Kumari & Kumar, 2023; Wang et al., 2024).

It is also important to recognize that employees differ in what drives them. These motivational differences explain why some employees remain consistent and committed despite challenges, while others lose momentum or give up easily. Some begin tasks enthusiastically but struggle to sustain effort, which affects results. This introduces an emerging management challenge: grit management. Understanding grit means understanding its origins—both internal and external. Research shows that the two dimensions of grit, perseverance of effort and consistency of interest, are shaped by motivation, and that gritty employees are influenced by both intrinsic and extrinsic factors (Zhao et al., 2024; Chen et al., 2018; Lee & Park, 2023).

Work motivation influences more than perseverance. It also affects employees' behavior and output—including creativity, engagement, and the overall quality of work. Motivated employees tend to show better performance, higher creativity, and stronger persistence, while demotivated ones may struggle in these areas (Engidaw, 2021; Yesuf et al., 2023; Amabile & Pratt, 2016). This reinforces that boosting innovation and creativity in the workplace requires a focus on motivation. In particular, intrinsic motivation has been consistently linked to greater creativity and improved performance, creating environments where new ideas can thrive (Engidaw, 2021; Hirst et al., 2009; Richter et al., 2012).

Despite the significance of motivation in shaping grit and innovative behavior, research in this area—especially within the educational context—remains limited. This study seeks to fill that gap by examining how work motivation influences employees' grit in pursuing their goals and their innovative work behavior in academic institutions.

The study is organized as follows: the introduction outlines the background and objectives; the literature review presents theories and prior studies; the methodology describes the design, participants, instruments, locale, procedures, and statistical tools; the next section provides data presentation and analysis; and finally, the results and discussion highlight key findings and their practical and theoretical implications.

## ***Literature review***

This part investigates literature that explains work motivation, grit, and innovative work behavior.

### ***The concept of work motivation***

Motivation can be understood differently depending on the perspective. In psychology, motivation is viewed as the internal force that drives individuals to act, sustain their energy, and persevere toward their goals—even in the face of difficulties (Mannell et al., 2014; Cherry, 2023). Over time, researchers have explained motivation through multiple theories.

Early perspectives include instinct theory, where William James and Sigmund Freud argued that behavior stems from innate survival instincts (Bandhu et al., 2024). Clark Hull later introduced drive theory, proposing that behavior is motivated by biological needs—such as hunger and thirst—and actions aim to restore internal balance or homeostasis (Hull, 1943, cited by Remley, 1980). Yerkes and Dodson’s arousal theory suggests that people act to maintain an optimal level of psychological arousal, seeking neither too much nor too little stimulation to perform well (Cohen, 2011; Hancock, 1987).

The humanistic perspective, led by Abraham Maslow, explains motivation as a process of fulfilling needs ranging from basic survival to self-actualization (Madsen & Wilson, 2012). In contrast, B.F. Skinner’s incentive theory proposes that behavior occurs in response to external rewards or stimuli (Skinner, 1938). Similarly, Vroom’s expectancy theory states that people exert effort when they believe good performance will lead to desired rewards and fulfill future expectations (Senda, 2025; Cherry, 2023).

In organizational contexts, motivation becomes directly tied to work. Work motivation is seen as the process that stimulates employees to take action toward organizational goals (Scott, 1961). Brech (1969, p.4) describes it as an “inspirational process” that encourages employees to commit, contribute effectively, and remain loyal to achieving collective tasks. In simpler terms, motivation in the workplace is a deliberate effort by management to inspire employees, strengthen morale, and encourage responsibility and goal achievement.

Because organizational motivation is goal-driven (Chen, 2016), leaders must understand how to motivate employees effectively. Several major approaches guide this process. The first is the need-based (content) theory of motivation, which explains that behavior is driven by fulfilling human needs. Maslow (1943, 1954) introduced a hierarchy of needs, ranging from physiological needs (such as food and water) to safety, social belonging, esteem, and ultimately self-actualization—the desire to achieve one’s highest potential (Baumeister & Leary, 1995; Navy, 2020).

Alderfer (1969) later modified Maslow’s model into the ERG theory, which groups needs into Existence, Relatedness, and Growth. Unlike Maslow, Alderfer argued that these needs are not strictly hierarchical and may be experienced simultaneously; failure to meet higher-level needs may cause individuals to regress to lower-level needs (Weber-Kramer, 2023).

Herzberg’s two-factor theory divides work factors into hygiene factors (such as workplace policies, salary, and security) and motivators (such as achievement, recognition, and growth). Hygiene factors prevent dissatisfaction, but true motivation comes from achievement and recognition (Herzberg et al., 1959; Herzberg, 1965).

McClelland’s acquired needs theory focuses on three primary needs: achievement, affiliation, and power. Those with a high need for achievement strive for excellence and innovation (Harrell & Stahl, 1981; Trevis & Certo, 2005; Turban & Keon, 1993), while individuals motivated by affiliation seek harmonious relationships (Wong & Csikszentmihalyi, 1991). The need for power involves influencing and guiding others, which is important in leadership roles (McClelland & Burnham, 1976; Spangler & House, 1991; Spreier, 2006).

The second major motivation category is process-based theory, which focuses on how people choose goals and allocate effort. Skinner’s operant conditioning theory suggests that behavior is shaped by rewards and punishments (Skinner, 1953). Equity theory argues that people evaluate fairness by comparing their inputs and outputs with others, feeling demotivated when effort is not fairly rewarded (Adams, 1965). Goal-setting theory

Abun et al., *Divine Word International Journal of Management and Humanities* 4(4)(2025) 2259-2286 states that specific, challenging, and accepted goals enhance motivation and performance (Locke, 1978; Taylor, 1911; Pinder, 1984).

Finally, expectancy theory explains motivation as a rational calculation where effort leads to performance, and performance leads to rewards (Vroom, 1964; Porter & Lawler, 1968). People work harder when they believe their effort will result in success and meaningful outcomes (Filipova, 2016; Sewandono et al., 2023).

In summary, motivation—whether driven by needs, rewards, fairness perceptions, or personal goals—plays a critical role in work behavior and performance. Understanding how employees are motivated enables organizations to design strategies that inspire effort, commitment, and long-term success.

### ***Intrinsic and extrinsic motivation***

According to Ryan and Deci (2002), not all human activities are driven by intrinsic motivation, such as a child engaging in play purely for the joy it brings. As individuals mature, their motivation often shifts. Activities and work are no longer pursued solely for pleasure but are increasingly driven by external factors, such as rewards or recognition (Schröder, 2023).

Earlier motivation theories—such as those proposed by Maslow, Herzberg, Alderfer, and McClelland—provided clear classifications of needs as either intrinsic or extrinsic. However, these frameworks can be difficult to apply directly to workplace settings due to their rigid distinctions (Gagné & Deci, 2005). In the context of work, motivation is typically divided into two broad categories: intrinsic and extrinsic. Intrinsic motivation refers to doing an activity because it is inherently interesting or enjoyable (Deci, 1975), whereas extrinsic motivation refers to engaging in behavior to obtain external outcomes, such as praise, rewards, or career advancement (Gagné & Deci, 2005).

However, Gagné and Deci (2005) argued that this simple binary view of motivation is insufficient to capture the complexity of workplace behavior. In response, they introduced Self-Determination Theory (SDT), which distinguishes between autonomous motivation and controlled motivation (Poppelaars et al., 2014).

Autonomous motivation involves engaging in activities with a sense of volition and self-endorsement—that is, doing something because one wants to, not because one is forced to (Dworkin, 1988). The satisfaction comes from the activity itself, not from any external reward. For example, one may perform a task simply because it is enjoyable or fulfilling (Zhu et al., 2024).

In contrast, controlled motivation is driven by external pressure. Individuals feel they "have to" do something to receive a reward or avoid punishment (Gagné & Deci, 2005). As Deci (1971) emphasized, the use of rewards represents a form of controlled motivation. These two types of motivation differ in terms of the regulatory processes that drive behavior and the experiences that accompany them. In this framework, motivation is no longer seen as a single construct but as a multidimensional continuum, where behaviors vary in how autonomous or controlled they are (Gagné & Deci, 2005, pp. 331–362).

Within SDT, Organismic Integration Theory (OIT) further classifies extrinsic motivation into four distinct types based on the degree of internalization:

*External Regulation* – Motivation is fully externally controlled; actions are performed to obtain rewards or avoid punishments, with a clear external locus of causality (deCharms, 1968).

*Introjected Regulation* – Behavior is driven by internal pressures, such as guilt or the desire to maintain self-worth, but not fully accepted as one's own (Williams et al., 1996; Uzun & Aydemir, 2020).

*Identified Regulation* – The individual consciously values the behavior and sees it as personally important, even if it is externally initiated (Brenner, 2022).

*Integrated Regulation* – The most autonomous form of extrinsic motivation; the behavior is fully aligned with one's values and identity, though still done to achieve an external outcome (Brenner, 2022).

Thus, SDT and OIT provide a more nuanced understanding of workplace motivation, acknowledging that people may be externally motivated in ways that are more or less aligned with their sense of self.

### ***Innovative work behavior***

Scott and Bruce (1994, 1998) introduced the concept of innovative work behavior; however, the founding fathers did not define IWB. Though many articles proposed definitions, however, according to De Spiegelaere, et al. (2014) most of these definitions are copied from West and Farr (1990) who defined innovative work behavior as the intentional introduction and application of ideas, processes, products or procedures, new to the relevant unit of adoption, designed to significantly benefit the individual, the group, organization or wider society. Later definitions are similar to the definition given by West and Farr (1990). For example, Spreitzer (1995) defines it as the creation of something new or different. Innovative behaviors are by definition change-oriented because they involve the creation of a new product, service, idea, procedure, or process. Janssen (2000, p. 288) also views it as "the intentional creation, introduction and application of new ideas within a work role, group or organization, to benefit role performance, the group, or the organization". Dorenbosh et al. (2005, p. 129) consider it "the willingness by individual employees to constitute on-the-job innovations – for example, the upgrading of ways of working, communication with direct colleagues, the use of computers, or the development of new services or products. "Those definitions are repetitions of the definition provided by West and Farr (1990) because there are no new dimensions added to the existing definition. Most definitions emphasize the novelty of innovation. However, De Spiegelaere et al. (2014) have criticized the notion that novelty alone is sufficient to determine an innovation, as novelty refers to the dependent result. Novelty is only known after something has been done successfully. Suppose innovative work behavior is measured only as result-dependent and neglects the generation, introduction, and application of new ideas, which lead to positive change or novelty (De Spiegelaere et al., 2014). In that case, it fails to describe innovative work behavior. Thus, to solve such an issue De Spiegelaere, et al. (2014) proposed a definition of innovative work behavior to include other dimensions such as the generation of an idea, introduction and the application of an idea as they define it as "all behaviors aimed at the generation, introduction and/or application (within a role, group or organization) of ideas, processes, products or procedures, new and intended to benefit the relevant unit of adoption"

Thus, from such a definition, the innovative work behavior is not a single construct but a multidimensional construct that includes the *generation of ideas, introduction, application, and a positive result* (benefit to the relevant unit) (Kleysen & Street, 2001). In terms of the dimensions, de Jong and Den Hartog (2008) identified four dimensions of innovative work behavior namely *opportunity exploration* (paying attention to issues that are not part of his daily work and wondering how things can be improved), *idea generation* (search out new working methods, techniques or instruments, generate original solutions for problems, find new approaches to execute tasks), *championing* ( make important organizational members enthusiastic for innovative ideas, attempt to convince people to support an innovative idea) and *application* (systematically introduce innovative ideas into work practices, contribute to the implementation of new ideas, and put the effort in the development of new

things). Although the definition of de Jong and Den Hartog does not include the benefit, it is sufficient to define the innovative work behavior that we are adopting in this study. The reason is that innovation should focus on idea generation, introduction, championing, and application (Kabir, 2019; Simon, 2009). The benefit is not included as an innovative work behavior variable because there is no result/benefit if there is no opportunity for exploration, idea generation, introduction, championing, and the application of ideas.

Many researchers have studied the function of innovative behavior. Several studies have examined the impact of innovative work behavior on organizational performance. For example, Shanker et al. (2017) examine the effect of innovative work behavior on organizational performance, and the study indicates that innovative work behavior is a contributing factor to organizational performance. Organizational performance is the output of individual performance, and the study also suggests that individual performance is influenced by innovative work behavior, as pointed out by Leong and Rasli (2013). Innovative work behavior is also influenced by other factors such as entrepreneurial culture or entrepreneurial work environment, as indicated by the study of Nguyen et al. (2021). These studies suggest that improving organizational performance requires paying attention to the work environment and determining whether it helps motivate employees to be innovative, as recommended by Purwanto's study (2020). Two key dimensions of the work environment that require attention are leadership and entrepreneurial culture.

### ***The concept of grit***

Organizational performance will always be dependent on many factors, like external and internal environment. External environmental factors can be the external market situation, which is dynamic and competitive, and can affect the organization's capability to operate and achieve its long-term objective (Fernandez-Araos, 2014). Internal environment factors can be leadership/management, practices, and employer-employee relationships, which can influence employees' performance (Kawasaki et al., 2022; Faez et al., 2023). However, it has to be recognized that employees' performance is not just dependent on leadership, management practices, employees' knowledge, skills, and motivation, but it also depends on employees' grit (Zyl et al., 2022; Lee, 2022; Chandrawaty & Widodo, 2020). Grit is employees' persistence and consistency in pursuing long-term objectives (van Zyl et al., 2023), which affects performance. Studies have indicated that grit is dependent on many other factors, like leadership (Rego et al., 2021) and a supportive environment (Chuented et al., 2023). It suggests that individual capability and desire to be consistent and persistent in carrying out duties and responsibilities to achieve long-term objectives, despite challenges, depend on other factors.

Grit has been one of the popular research topics in psychology investigated by many researchers over the past decade. It was first introduced in 2007 and defined as a compound personality of perseverance and passion to achieve long-term goals (Duckworth et al., 2007). It explains the passion of someone to achieve long-term objectives with interest and persistence. Interest and persistence are shown through one's behavior that does not abandon the goal even when other goals or other projects are appealing. In other words, someone sticks it out with a chosen goal or project day in and day out (Datu, 2021). Psychologists consider grit as a non-cognitive trait that explains the consistency of someone for a particular interest and the persistence of effort to achieve it even in challenging times. It is different from other psychological factors that are similar to it, like conscientiousness, resilience, work ethics, need for achievement, industriousness, hardiness, and self-control (Duckworth et al., 2007; Jordan et al., 2019; Meriac et al., 2015; Febriawan & Maulina, 2019).

There are two dimensions of grit identified by Duckworth et al. (2007), namely consistency of interest and persistence of effort. Consistency of interest is the ability of someone to maintain the level of the original set of interests over time (Duckworth & Quinn, 2009). Alternatively, it is the ability of someone not to be distracted by

other things in pursuing a particular interest and goals over a long period until the goal is achieved (Datu et al. 2017, p. 198). One constantly shows the same interest and effort in pursuing the objectives. Persistence of effort means the ability to show diligence in achieving the goals despite the challenges along the way (Eskreis-Winkler et al., 2016). One is not giving up on pursuing the goal. As Datu et al. (2017) defined it, it is the willingness to stay on the course of action and be committed to achieving the goal despite problems. Though a recent study by Frebriawan and Maulina (2019) proposed three dimensions of grit: consistency of effort, persistence of effort, and adaptability, the current study adopts the earlier dimensions proposed by Duckworth et al. (2007), which are consistency and persistence. The reason is apparent that adaptability does not suggest abandoning and changing the objectives, but one can be flexible in strategies to achieve the same objectives. One can also be flexible in pursuing the goal according to the situation, but the effort to achieve the goal is still consistent and persistent.

There are mixed results about the influence of grit on success. Duckworth, et al. (2007), Duckworth and Quinn (2009), and Akos and Kretchmar (2017) recognized that success in attaining long-term goals is not only attributed to talent or IQ, but grit also has been significantly associated with the achievement of challenging goals and academic performance. A recent study by Robbins (2022) supported the findings of earlier studies, indicating that sustained effort and hard work despite setbacks or failure are contributing factors to the academic achievement of university students. However, some later studies, in the academic setting, have demonstrated that grit is not a significant contributing factor to the academic performance of students (Bazelais et al., 2016). Tang et al. (2021) and Christopoulou et. al. (2018) recognized its contribution, but it is considerably weak to moderate. These conflicting results suggest that grit is not a consistent and single predictor of academic performance.

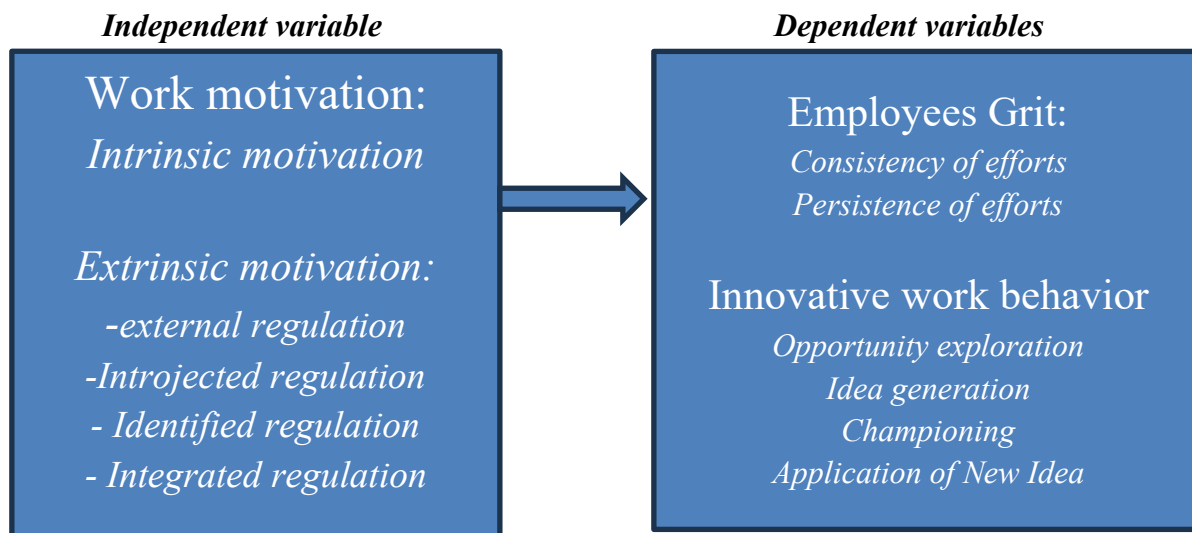
### ***Innovative work behavior***

Scott and Bruce (1994, 1998) introduced the concept of innovative work behavior; however, these founding fathers did not define IWB. Though many articles proposed definitions, however, according to De Spiegelaere, et al. (2014) most of these definitions are copied from West and Farr (1990) who defined innovative work behavior as the intentional introduction and application of ideas, processes, products or procedures, new to the relevant unit of adoption, designed to significantly benefit the individual, the group, organization or wider society. Later definitions are similar to the definition given by West and Farr (1990). For example, Spreitzer (1995) defines it as the creation of something new or different. Innovative behaviors are by definition change-oriented because they involve the creation of a new product, service, idea, procedure, or process. Janssen (2000, p. 288) also views it as "the intentional creation, introduction and application of new ideas within a work role, group or organization, to benefit role performance, the group, or the organization". Dorenbosh et al. (2005, p. 129) consider it "the willingness by individual employees to constitute on-the-job innovations – for example, the upgrading of ways of working, communication with direct colleagues, the use of computers, or the development of new services or products. "Those definitions are repetitions of the definition provided by West and Farr (1990) because there are no new dimensions added to the existing definition. Most definitions emphasize the novelty of innovation. However, De Spiegelaere et al. (2014) have criticized the notion that novelty alone is sufficient to determine an innovation, as novelty refers to the dependent result. Novelty is only known after something has been done successfully. Suppose innovative work behavior is measured only as result-dependent and neglects the generation, introduction, and application of new ideas, which lead to positive change or novelty (De Spiegelaere et al., 2014). In that case, it fails to describe innovative work behavior. Thus, to solve such an issue De Spiegelaere, et al. (2014) proposed a definition of innovative work behavior to include other dimensions such as the generation of an idea, introduction and the application of an idea as they define it as "all behaviors aimed at the generation, introduction and/or application (within a role, group or organization) of ideas, processes, products or procedures, new and intended to benefit the relevant unit of adoption"

Thus, from such a definition, the innovative work behavior is not a single construct but a multidimensional construct which includes the *generation of ideas, introduction, application, and a positive result* (benefit to the relevant unit) (Kleysen & Street, 2001). In terms of the dimensions, de Jong and Den Hartog (2008) identified four dimensions of innovative work behavior namely *opportunity exploration* (paying attention to issues that are not part of his daily work and wondering how things can be improved), *idea generation* (search out new working methods, techniques or instruments, generate original solutions for problems, find new approaches to execute tasks), *championing* ( make important organizational members enthusiastic for innovative ideas, attempt to convince people to support an innovative idea) and *application* (systematically introduce innovative ideas into work practices, contribute to the implementation of new ideas, and put the effort in the development of new things). Although the definition of de Jong and Den Hartog does not include the benefit, it is sufficient to define the innovative work behavior that we are adopting in this study. The reason is that innovation should focus on idea generation, introduction, championing, and application (Kabir, 2019; Simon, 2009). The benefit is not included as an innovative work behavior variable because there is no result/benefit if there is no opportunity for exploration, idea generation, introduction, championing, and the application of ideas.

Many researchers have studied the function of innovative behavior. Several studies have examined the impact of innovative work behavior on organizational performance. For example, Shanker et al. (2017) examine the effect of innovative work behavior on organizational performance, and the study indicates that innovative work behavior is a contributing factor to organizational performance. Organizational performance is the output of individual performance, and the study also suggests that individual performance is influenced by innovative work behavior, as pointed out by Leong and Rasli (2013). Innovative work behavior is also influenced by other factors such as entrepreneurial culture or entrepreneurial work environment, as indicated by the study of Nguyen et al. (2021). These studies suggest that improving organizational performance requires paying attention to the work environment and determining whether it helps motivate employees to be innovative, as recommended by Purwanto's study (2020). Two key dimensions of the work environment that require attention are leadership and entrepreneurial culture. In the context of the current study, the researcher intended to examine the influence of intrinsic work motivation on innovative work behavior.

## Conceptual framework



Source: Deci and Ryan (2000), de Jong and Den Hartog (2008), and Duckworth et al. (2007)

Figure 1: The conceptual framework explains the objective and concept of the study. It intends to examine the impact of work motivation on employees' grit and innovative work behavior.

## ***Statement of the problems***

The study examined the influence of intrinsic work motivation on the employees' grit and innovative work behavior. It specifically seeks to answer the following questions:

1. What is the level of intrinsic work motivation of the employees?
2. What is the extrinsic work motivation of employees in terms of:
  - a. External regulation
  - b. Introjected regulation
  - c. Identified regulation
  - d. Integrated regulation
3. What is the level of employees' grit in terms of:
  - a. Consistency of efforts
  - b. Persistence of effort
4. What is the level of innovative work behavior of employees in terms of:
  - a. Opportunity for exploration
  - b. Idea generation
  - c. Championing
  - d. Application of a new idea
5. Is there a relationship between work motivation and employees' grit?
6. Is there a relationship between work motivation and employees' innovative work behavior?

## ***Hypothesis***

Many studies examined the influence of work motivation on work performance. Those studies noted the positive correlations between motivation and job performance, like that of Kleinbeck (1987), Elamalki et al. (2024), Forson et al. (2021), and Raisal et al. (2021). The current study hypothesizes that work motivation affects employees' grit and innovative work behavior.

## ***Scope and delimitation of the study***

The study limits its coverage to the employees of the Divine Word College of Laoag and only about the effect of work motivation, along with intrinsic and extrinsic work motivation, on the grit and innovative work behavior of the employees of the institution.

## ***Research methodology***

The study is a quantitative study and thus, it utilizes a descriptive assessment and correlational research design. The locale and the population of the study are the Divine Word College of Laoag and its employees. The study employs questionnaires to collect data, utilizing both descriptive and inferential statistics. Consequently, it employs the weighted mean and Pearson  $r$  for data analysis. During the data collection process, the researcher sent a letter to the President requesting permission to distribute the questionnaires. The data collection was then

Abun et al., *Divine Word International Journal of Management and Humanities* 4(4)(2025) 2259-2286  
 conducted through the employees' representatives. The researcher also considered the ethical review, and since the research does not involve sensitive human issues, the ethical review was waived.

The following ranges of values with their descriptive interpretation were used:

<b>Statistical Range</b>	<b>Descriptive Interpretation</b>
4.21-5.00	Strongly Agree/Very High (SA/VH)
3.41-4.20	Agree/High (A/H)
2.61-3.40	Somewhat Agree/Moderate (SWA/M)
1.81-2.60	Disagree/Low (D/L)
1.00-1.80	Strongly Disagree/Very Low (SD/VL)

## **Data presentation and analysis**

The study aimed to examine the influence of intrinsic work motivation on the employees' grit and innovative work behavior. It specifically seeks to answer the following questions:

**Problem 1: What is the level of intrinsic work motivation of the employees?**

**Table 1: Level of intrinsic work motivation of the employees**

<b>Indicators</b>	<b>Mean</b>	<b>DR</b>
<b>I work.....</b>		
1. I derive much pleasure from learning new things in my job.	3.99	A/H
2. For the satisfaction I experience from taking on interesting challenges.	3.93	A/H
3. For the satisfaction I experience when I am successful at doing a difficult task.	4.09	A/H
<b>Composite Mean</b>	<b>4.00</b>	<b>A/H</b>

**Source: Deci and Ryan (2000), SPSS IBM**

Legend:

4.21-5.00	Strongly Agree/Very High (SA/VH)
3.41-4.20	Agree/High (A/H)
2.61-3.40	Somewhat Agree/Moderate (SWA/M)
1.81-2.60	Disagree/Low (D/L)
1.00-1.80	Strongly Disagree/Very Low (SD/VL)

The intrinsic work motivation of the employees (teaching staff and administrative staff) obtained a composite mean rating of 4.00, which indicates a high degree/level of intrinsic work motivation. The employees agree that they work because they derive much pleasure from learning new things in their job (3.99), find satisfaction in taking up new challenges (3.93), and when they accomplish complex tasks (4.09). High intrinsic work motivation is driven by autonomy, mastery, and purpose. The management must foster such a work motivation by giving employees more control over their work, providing opportunities for skill development and challenge, and connecting tasks to a larger purpose of the institution (Kinley & Ben-Hur, 2019; Mlynek et al., 2025).

**Problem 2: What is the extrinsic work motivation of employees in terms of:**

- a. External regulation
- b. Introjected regulation
- c. Identified regulation
- d. Integrated regulation

**Table 2: Extrinsic work motivation of the employees in terms of external regulation**

Indicators	Mean	DR
<b>I work.....</b>		
1. For the income, it provides me.	3.74	A/H
2. Because it allows me to earn money.	3.76	A/H
3. Because my work provides me with security	3.65	A/H
<b>Composite Mean</b>	<b>3.72</b>	<b>A/H</b>

Source: Deci and Ryan (2000), SPSS IBM

The extrinsic work motivation of employees in terms of external regulation gained a composite mean rating of 3.72, which is considered high. It means that the work motivation of employees is highly driven by external regulation. The employees agreed that they work for income that can provide them with their needs. Such a rating suggests that employees' work is driven by external factors such as rewards, punishment, money, and social pressure rather than personal interest (Ryan & Deci, 2000; Ryan & Deci, 2022).

**Table 3: Extrinsic work motivation of the employees in terms of introjected regulation**

Indicators	Mean	DR
<b>I work.....</b>		
1. Because I want to succeed at this job, if not, I would be very ashamed of myself.	3.78	A/H
2. Because I want to be very good at this work, otherwise, I would be very disappointed	3.87	A/H
3. Because I want to be a winner in life	3.81	A/H
<b>Composite Mean</b>	<b>3.82</b>	<b>A</b>

Source: Deci & Ryan (2000), SPSS IBM

Indicated by the data in the table, the extrinsic work motivation of employees in terms of introjected regulation obtained a composite mean rating of 3.82, which means high. It suggests that extrinsic work motivation, specifically introjected regulation of employees, is not very high and it is not also very low, low, or moderate, but it is high. The employees agree that they want to succeed in their job to avoid shame and disappointment, and want to be a winner. The finding implies that the work motivation of employees is driven by internal pressure, such as avoiding guilt or anxiety and seeking ego-enhancement and pride (Ryan & Deci, 2000; Urhahne & Wijnia, 2023).

**Table 4: Extrinsic work motivation of the employees in terms of identified regulation**

Indicators	Mean	DR
<b>I work.....</b>		
1. Because I want to attain a particular lifestyle	3.71	A/H
2. Because I want to attain my career goals, because I want to be very good at this work, otherwise, I would be very disappointed	4.01	A/H
3. Because it is the type of work I have chosen to attain certain important objectives	3.86	A/H
<b>Composite Mean</b>	<b>3.86</b>	<b>A/H</b>

Source: Deci and Ryan (2000), SPSS IBM

It appears in the table that the extrinsic work motivation in terms of identified regulation received a mean rating of 3.86, which suggests that employees' work motivation in terms of identified regulation is not very high, nor is it very low, low, or moderate, but it is high. The employees highly agree that they work to be able to enjoy a certain lifestyle and to attain certain career goals or objectives. Identified regulation suggests that employees are working driven by individual values and the outcome of a task, making the behavior internally governed and endorsed, but not necessarily enjoyable. However, compared to external and introjected regulation, identified regulation is a more autonomous type of extrinsic motivation, which differs from intrinsic motivation because it is based on the perceived value and outcome of the task, not on the inherent enjoyment or interest in the task or activity itself. Someone is working hard because he or she knows it is important for his/her career and to achieve his/her goals (Ryan & Deci, 2020; Legault, 2016; Trautner et al., 2025).

**Table 5: Extrinsic work motivation of the employees in terms of integrated regulation**

Indicators	Mean	DR
<b>I work.....</b>		
1. Because it is a fundamental part of who I am.	3.85	A/H
2. Because it is part of how I have chosen to live my life.	3.85	A/H
3. Because this job is part of my life	3.77	A/H
<b>Composite Mean</b>	<b>3.82</b>	<b>A/H</b>

Source: Deci and Ryan (2000), SPSS IBM.

The data manifest that the employees' extrinsic work motivation in terms of integrated regulation obtained a composite mean rating of 3.82, which implies that the extrinsic work motivation of employees in terms of integrated regulation is not very high. It is very low, low, or moderate, but it is high. The employees agree that they work because they believe that it is a fundamental part of being a human person and part of their lives, and it is the work they choose to live their lives. Integrated regulation is the most autonomous form of extrinsic motivation. The employees are working driven, not by the enjoyment of the work but because of the values and beliefs that are fully assimilated into their sense of self and identity. The work is seen as part of who they are, and the work is aligned to their core values (Ryan & Deci, 2000; Legault, 2016; Morris et al., 2022).

**Table 6: Summary of extrinsic work motivation**

Indicators	Mean	DR
External regulation	3.72	A/H
Introjected regulation	3.82	A/H
Identified regulation	3.86	A/H
Integrated regulation	3.82	A/H
<b>Overall Mean</b>	<b>3.81</b>	<b>A/H</b>

Source: Deci and Ryan (2000), SPSS, IBM

As shown in the summary table, the employees' extrinsic work motivation obtained an overall mean rating of 3.81, which is interpreted as high. All four dimensions of extrinsic motivation were also rated at the same high level: external regulation (3.72), introjected regulation (3.82), identified regulation (3.86), and integrated regulation (3.82).

A high level of extrinsic work motivation suggests that employees are primarily driven by external rewards or by the desire to avoid negative outcomes, rather than by internal satisfaction. In other words, their motivation is influenced by factors such as salary, bonuses, praise, promotions, or the fear of punishment (Ryan & Deci, 2000; Urhahne et al., 2023).

**Problem 3: What is the level of employees’ grit in terms of:**

- a. consistency of efforts
- b. persistence of effort

**Table 7: Level of employees’ grit in terms of consistency of efforts/interest**

Indicators	Mean	DR
1. I often set a goal and pursue it	3.68	A/H
2. New Ideas and Projects do not distract me from previous ones.	3.68	A/H
3. I have been obsessed with a particular idea or project and have pursued it despite changes	3.59	A/H
4. I maintain my focus on projects that take more than a few months to complete.	3.64	A/H
<b>Composite Mean</b>	<b>3.65</b>	<b>A/H</b>

**Source: Duckworth, et al (2007), SPSS IBM**

The employees’ grit in terms of consistency of effort obtained a mean rating of 3.65, which is interpreted as high. This indicates that the employees demonstrate a generally strong level of perseverance—neither extremely high nor low, but consistently high. When considered individually, the results suggest that employees tend to set goals and pursue them despite challenges or distractions.

Grit refers to the sustained and focused application of effort over time, particularly when facing uncertainty or adversity. Employees who exhibit grit continue to work hard, persist through setbacks, and remain committed to their long-term goals (Duckworth et al., 2007; Duckworth & Quinn, 2009; Datu, 2021).

**Table 8: Level of employees’ grit in terms of persistence of efforts**

Indicators	Mean	DR
1. I finish whatever I begin.	4.26	SA/VH
2. Setbacks do not discourage me.	4.00	A/H
3. I am a hard worker.	4.18	A/H
4. I am diligent.	4.22	SA/VH
<b>Composite Mean</b>	<b>4.17</b>	<b>A/H</b>

**Source: Duckworth, et al (2007), SPSS IBM**

Based on the data in the table, the employees’ grit in terms of persistence of effort received a composite mean of 4.17, which is interpreted as high. This means that the employees generally show strong determination to keep going, even if things get difficult. Their level of persistence is not extremely high, but it’s consistently high enough to show that they do not easily give up.

Looking at the details, most employees agreed that they finish what they start, even when they face setbacks. They also see themselves as diligent and hardworking, especially when it comes to achieving their goals.

Persistence of effort simply means continuing to work hard and stay dedicated to one’s long-term goals, even when faced with challenges or disappointments. It shows a person’s ability to stay focused and committed until the goal is accomplished (Duckworth et al., 2007; Eskreis-Winkler et al., 2016).

**Table 9: Summary of employees’ grit**

Indicators	Mean	DR
1 Consistency of efforts	3.65	A/H
2 Persistence of efforts	4.17	A/H
<b>Overall Mean</b>	<b>3.91</b>	<b>A/H</b>

Overall, the data show that the employees’ grit obtained an overall mean rating of 3.91, which is interpreted as high. This means that, in general, employees demonstrate a strong level of determination and perseverance in their work. Both dimensions of grit—consistency of effort and persistence of effort—were also rated high, showing that employees tend to stay focused on their goals and keep working hard even when challenges arise.

Grit refers to a person’s tendency to persist and maintain effort toward long-term goals, despite difficulties or setbacks. It combines both passion and perseverance, qualities that often lead to better job performance and help employees contribute meaningfully to the organization’s overall mission and vision (Kristinsson et al., 2023; Nisar et al., 2020).

**Problem 4: What is the level of innovative work behavior of employees in terms of:**

- a. Opportunity for exploration
- b. Idea generation
- c. Championing
- d. Application of a new idea

**Table 10: Level of innovative work behavior of employees in terms of opportunity exploration**

Indicators	Mean	DR
1. I pay attention to issues that are not part of my daily work.	3.68	A/H
2. How can things be improved?	4.10	A/H
<b>Composite Mean</b>	<b>3.89</b>	<b>A/H</b>

**Source: de Jong and Den Hartog (2008), SPSS IBM**

Reading the data in the table, it demonstrates that the level of innovative work behavior of employees in terms of opportunity exploration received a composite mean rating of 3.89, which is high. Such a rating indicates that employees' innovative work behavior in terms of opportunity exploration is not very high, nor is it very low, low, or moderate, but it is high. The employees agreed that they pay attention to issues that are not part of their daily work and how they can be improved. IWB (Innovative work behavior) in terms of opportunity exploration involves proactively looking for new possibilities by paying attention to issues outside of daily tasks, questioning how things can be improved, and exploring problems to find innovative solutions (Parnitvitidkun, et al., 2024; Srirahayu, et al, 2023; Chaiyapruksayanonde & Ponchaitiwat, 2025).

**Table 11: Level of innovative work behavior of employees in terms of idea generation**

Indicators	Mean	DR
1. I search out new working methods, techniques, or instruments	4.18	A/H

2. I generate original solutions for problems.	4.11	A/H
3. I find new approaches to executing tasks.	4.16	A/H
<b>Composite Mean</b>	<b>4.15</b>	<b>A/H</b>

*Source: de Jong and Den Hartog (2008), SPSS IBM*

Employees’ innovative work behavior in terms of idea generation achieved a composite mean rating of 4.15, which is interpreted as high. This means that employees actively demonstrate creativity in their work, showing a strong tendency to think of new ways to solve problems and accomplish tasks. Their level of idea generation is consistently high—not exceptionally high, but clearly above average.

Most employees agreed that they constantly look for new methods or techniques that can help improve their work and address challenges effectively. Idea generation serves as the first stage of the innovation process, where individuals or teams deliberately develop new concepts, products, or approaches to solve problems. It involves exploring possibilities, brainstorming, and conceptualizing ideas freely without immediate judgment or criticism (Srirahayu et al., 2023; Xu & Suntrayuth, 2022).

**Table 12: Level of innovative work behavior of employees in terms of championing**

Indicators	Mean	DR
1. I make important organizational members enthusiastic about innovative ideas	4.05	A
2. I attempt to convince people to support an innovative idea	4.06	A
<b>Composite Mean</b>	<b>4.05</b>	<b>A</b>

*Source: de Jong and Den Hartog (2008), SPSS IBM*

Employees’ innovative work behavior in terms of championing obtained a composite mean rating of 4.05, which is interpreted as high. This indicates that employees consistently show strong initiative in promoting and supporting new ideas within their organization. Their level of championing is not extremely high but remains firmly within the high range, showing that they are proactive in pushing for innovation.

Most employees agreed that they encourage others to become enthusiastic about new ideas and convince key organizational members to support these innovations. Championing refers to the process of actively advocating for and supporting new ideas to ensure their successful development and implementation. It involves gaining support, building confidence in the proposed ideas, and acting as a driving force to bring these innovations to life (Effendy & Sukmarani, 2021; Jonsson & Kahler, 2022).

**Table 13: Level of innovative work behavior of employees in terms of application of new ideas**

Indicators	Mean	DR
1. I systematically introduce innovative ideas into work practices	4.07	A
2. I contribute to the implementation of new ideas	4.04	A
3. I put the effort into the development of new things	4.10	A
<b>Composite Mean</b>	<b>4.07</b>	<b>A</b>

*Source: de Jong and Den Hartog (2008), SPSS IBM*

Based on the data in the table, the level of innovative work behavior of employees in terms of the application of new ideas obtained a composite mean rating of 4.07, which is high. All indicators are also rated within the same level of mean rating, which is high. The employees agreed that they systematically introduce new ideas into work

practices and put effort into the implementation of new ideas. Innovative work behavior in terms of applying new ideas involves the entire process from generating new concepts to implementing them within the organization to solve problems or improve work methods. It involves discovering new possibilities, championing new ideas, and incorporating them into daily work (Srirahayu et al., 2023; Xu & Suntrayuth, 2022).

**Table 14: Summary of innovative work behavior**

Indicators	Mean	DR
Opportunity for exploration	3.89	A/H
Idea generation	4.15	A/H
Championing	4.05	A/H
Application of a new idea	4.07	A/H
<b>Overall Mean</b>	<b>4.04</b>	<b>A/H</b>

*Source: de Jong and Den Hartog (2008), SPSS IBM*

The summary table shows that the employees’ overall innovative work behavior obtained a mean rating of 4.04, which is interpreted as high. This means that, in general, employees demonstrate a strong tendency to think creatively and apply innovative approaches in their work. All four dimensions of innovative work behavior were also rated high, indicating that employees consistently engage in generating, promoting, and implementing new ideas within the organization.

Innovative work behavior refers to an employee’s ability to introduce and apply new and useful ideas, products, or services to enhance organizational performance and achieve its goals. It reflects not only creativity but also the willingness to turn ideas into practical improvements that benefit the organization (Isaksen et al., 1999; Amabile, 1988; Kleysen & Street, 2001; Xu & Suntrayuth, 2022).

**Problem 5: Is there a relationship between intrinsic motivation and employees’ grit?**

**Table 15: Relationship between work motivation and employees’ grit**

		Pearson's r	Interpretation	p-value/ Significance	Decision
Intrinsic work motivation	Consistency of efforts	0.091	+Very weak Relationship	0.251	Not Significant
			+Very weak Relationship		Not Significant
	Persistence of efforts	0.056	Relationship	0.480	Significant
			Employee's grit as a whole		0.108
Extrinsic work motivation	Consistency of efforts	-0.013	-Very weak Relationship	0.868	Not Significant
			+Very weak Relationship		Not Significant
	Persistence of efforts	0.026	Relationship	0.741	Significant
			<b>Employee's grit as a whole</b>		0.013

**Note.** \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

*Source: SPSS IBM*

The correlation results show that all p-values are greater than 0.05, indicating that the correlations are not statistically significant. This means that both intrinsic and extrinsic motivation do not have a significant influence on employees' grit, whether in terms of consistency of effort, persistence of effort, or overall grit.

Although the relationships are positive in direction, their strength is too weak to suggest a meaningful association. Therefore, the findings fail to reject the null hypothesis, implying that there is no significant relationship between work motivation and employees' grit.

**Problem 6: Is there a relationship between work motivation and employees' innovative work behavior?**

**Table 16: Relationship between work motivation and employees' innovative work behavior**

Innovative work behavior	Pearson's r	Interpretation	p-value/Significance	Decision
<b>Intrinsic Work motivation</b>	0.063	Very Weak Relationship	0.425	Not significant
<b>Extrinsic Work motivation</b>	0.024	Very Weak Relationship	0.763	Not significant

**Note.** \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

Source: SPSS IBM

The correlation analysis indicates that intrinsic and extrinsic work motivation show only a very weak relationship with innovative work behavior. The computed Pearson's r values of 0.063 and 0.024 suggest that while higher levels of motivation may slightly correspond with more innovative behaviors, the relationship is extremely weak and not statistically significant, as the p-values are greater than 0.05.

## Discussion

The results of the study show that employees generally have high levels of work motivation, and their grit and innovative work behavior are also rated as high. However, the results of the Pearson r correlation analysis reveal that these high levels of grit and innovative work behavior are not significantly influenced by intrinsic or extrinsic motivation. In other words, even though employees are motivated, their motivation alone does not necessarily predict their grit or innovative behavior.

In the context of this study—an educational setting—this finding suggests that motivation alone may not be the driving force behind grit. Instead, grit may be shaped by other factors such as personality traits, personal goals, or external influences. Previous research supports this idea, showing that personal strengths and goal orientation can strongly influence grit (Duckworth et al., 2007; Chen et al., 2018; Jin & Kim, 2017; Alhadabi & Karpinski, 2020). This means that work motivation is not enough on its own to enhance grit. Other elements such as resilience, passion, and a sense of purpose may play a greater role in sustaining perseverance.

While work motivation remains important, grit should be viewed as a hierarchical construct—one that integrates passion and perseverance, but is also grounded in deeper psychological factors like resilience, self-belief, self-efficacy, and purpose (Jordan et al., 2019; Datu, 2021; Wang et al., 2017; Hochanadel & Finamore, 2015). These findings highlight the need for further research to explore other possible variables that could explain what drives employees' grit beyond motivation alone.

A similar pattern is seen in the negative correlation between work motivation and innovative work behavior. This suggests that work motivation may not directly drive innovation, and that other factors—such as autonomy, self-efficacy, creativity, leadership, or organizational culture—may play a more significant role. Employees' ability to innovate might depend more on empowerment, supportive environments, available resources, and confidence in their creative abilities, rather than on motivation alone.

Existing research supports this idea, showing that motivation may enhance innovation indirectly by increasing creative self-efficacy (Wahyuningsih & Hafid, 2025; Saif et al., 2024). However, motivation by itself is not a sufficient condition for innovative behavior; both individual and environmental factors interact to influence innovation at work. Thus, organizations should not only focus on motivating employees but also on creating a supportive culture for innovation—one that provides resources, encourages experimentation, and accepts mistakes or failures as part of the learning process (Yuan et al., 2022; Younas et al., 2021; Wang et al., 2020).

Overall, the results point to the importance of contextual and organizational factors—such as leadership style, culture, and work environment—in shaping both grit and innovative work behavior. These findings call for a more nuanced understanding of what truly drives employees to persist and innovate in the workplace.

## ***Conclusion***

The study aimed to examine the effect of work motivation on employees' grit and innovative work behavior. Results showed that employees exhibited high levels of both intrinsic and extrinsic motivation, as well as high levels of grit and innovative work behavior. However, the correlation analysis revealed that neither intrinsic nor extrinsic motivation significantly predicted employees' grit or innovative work behavior. This means that, within the educational setting, work motivation alone does not serve as a predictor of employees' perseverance or their tendency to engage in innovative actions. Consequently, the hypothesis of the study is rejected.

These findings suggest that other factors—such as leadership, organizational culture, and management support—may play a more crucial role in enhancing grit and innovative work behavior among employees. Future research should explore these factors further to identify strategies that effectively strengthen perseverance and innovation in the workplace.

The study also acknowledges its limitations, as it focused only on intrinsic and extrinsic work motivation and was limited to the employees of the Divine Word College of Laoag. Therefore, the results cannot be considered conclusive. Future studies with broader scope, larger samples, and additional variables are recommended to provide a more comprehensive understanding of what truly drives employees' grit and innovative work behavior.

***Authors' contribution:*** Conceptualization: M.J.E., T.M., A.P. Data Gathering: J.M., M.S., M.M.K., M.K.T. Data analysis: M. J. E., T.M., J.M.

***Ethical review statement:*** The study does not involve vulnerable individuals, and the data were gathered with the permission of the President of the institution. It made sure that no sensitive information was included in the data gathering.

***Conflict of interest:*** The authors declare no conflict of interest.

***Funding:*** The study was funded by the authors.

## References

- Adams, J.S. (1965). Inequity in social exchange. In L. Berkowitz (ed.). *Advances in experimental social psychology* (Vol. 2). Academic Press.
- Akos, P., & Kretchmar, J. (2017). Investigating grit as a non-cognitive predictor of college success. *The Review of Higher Education*, 40, 163–186. <https://doi.org/10.1353/rhe.2017.0000>
- Alderfer, C. P. (1969). An empirical test of a new theory of human needs. *Organizational Behavior & Human Performance*, 4(2), 142–175. [https://doi.org/10.1016/0030-5073\(69\)90004-X](https://doi.org/10.1016/0030-5073(69)90004-X)
- Alhadabi, A., & Karpinski, A. C. (2020). Grit, self-efficacy, achievement orientation goals, and academic performance in university students. *International Journal of Adolescence and Youth*, 25(1), 519–535.
- AlKhalifa, J., Nawaz, N., & Sawaya, R. (2025). Motivational factors and employee performance: A Comprehensive Analysis. In: Hamdan, A. (eds) *Achieving sustainable business through AI, technology education and computer science*. Springer. [https://doi.org/10.1007/978-3-031-70855-8\\_53](https://doi.org/10.1007/978-3-031-70855-8_53)
- Amabile, T. M. (1988). A model of creativity and innovation in organizations. *Research in organizational behavior*, 10(1), 123–167.
- Amabile, T. M., & Pratt, M. G. (2016). The dynamic componential model of creativity and innovation in organizations: Making progress, making meaning. *Research in organizational behavior*, 36, 157-183.
- Arda ÖA, & Yıldız B (2019). The moderating role of transformational leadership on the relationship between careerism and social loafing behaviors: a propositional review. In: Handbook of research on contemporary approaches in management and organizational strategy. IGI Global, pp 226–247
- Arnold, K. A., Connelly, C. E., Gellatly, I. R., Walsh, M. M., & Withey, M. J. (2017). Using a pattern-oriented approach to study leaders: Implications for burnout and perceived role demand. *Journal of Organizational Behavior*, 38(7), 1038–1056.
- Bandhu, D., Mohan, M.M., Nittala, N.A.P., Jadhau, P., Bhadauria, A. & Saxena, K.K. (2024). Theories of motivation: A comprehensive analysis of human behavior drivers. *Acta Psychologica*, 244. <https://doi.org/10.1016/j.actpsy.2024.104177>
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117, 497–529
- Bazelais, L.D.J. & Doleck, T. (2016). How does grit impact College students' academic achievement in science? *European Journal of Science and Mathematics Education*, 4(1), 33–43.
- Brech, E.F. L. (1969). *Management: its nature and significance*. Pitman

- Brenner, C.A. (2022). Self-regulated learning, self-determination theory, and teacher candidates' development of competency-based teaching practices. *Smart Learning Environment*, 9(3). <https://doi.org/10.1186/s40561-021-00184-5>
- Chaiyapruksayanonde, C., & Ponchaitiwat, K. (2025). Supportive Work Environments, Innovative Work Behavior, and Job Performance in the Hospitality Industry: Empirical Evidence from Thailand. *Tourism and Hospitality*, 6(1), 20. <https://doi.org/10.3390/tourhosp6010020>
- Chandrawaty, C. & Widodo, W. (2020). An empirical Effect of grit on task performance: Mediating by transformational leadership and job involvement. *Journal of Xi'an University of Architecture & Technology*, 12(4).
- Chen, C., Ye, S., & Hangen, E. (2018). Predicting achievement goals in the East and West: The role of grit among American and Chinese university students. *Educational Psychology*, 38(6), 820-837.
- Chen, CA. (2016). Employee work motivation. In: Farazmand, A. (eds) *Global encyclopedia of public administration, public policy, and governance*. Springer. [https://doi.org/10.1007/978-3-319-31816-5\\_2560-1](https://doi.org/10.1007/978-3-319-31816-5_2560-1)
- Cherry, K. (2023). What motivation theory can tell us about human behavior? *Very Well Mind*. Retrieved from <https://www.verywellmind.com/theories-of-motivation-2795720>
- Christopoulou, M., Lakioti, A., Pezirkianidis, C., Karakasidou, E. & Stalikas, A. (2018). The role of grit in education: A systematic review. *Psychology*, 9, 2951–2971. <https://doi.org/10.4236/psych.2018.915171>
- Chuented, P., Puranitee, P., & Pakakasama, S. (2023). Factors affecting residents' internal motivation, grit, and well-being. *BMC Medical Education*, 23, 779 (2023). <https://doi.org/10.1186/s12909-023-04679-2>.
- Cohen, R.A. (2011). Yerkes–Dodson law. In: Kreutzer, J.S., DeLuca, J., Caplan, B. (eds) *Encyclopedia of clinical neuropsychology*. Springer. [https://doi.org/10.1007/978-0-387-79948-3\\_1340](https://doi.org/10.1007/978-0-387-79948-3_1340)
- Datu, J. A. D., Yuen, M., & Chen, G. (2017). Development and validation of the triarchic model of grit scale (TMGS): Evidence from Filipino undergraduate students. *Personality and Individual Differences*, 114, 198–205. <https://doi.org/10.1016/j.paid.2017.04.012>
- Datu, J. A. D. (2021). Beyond passion and perseverance: Review and future research initiatives on the science of grit. *Frontiers in Psychology*, 11, 545526. <https://doi.org/10.3389/fpsyg.2020.545526>
- deCharms, R. (1968). *Personal causation: The internal affective determinants of behavior*. Academic Press.
- Deci, E. L. (1971). Effects of externally mediated rewards on intrinsic motivation. *Journal of Personality and Social Psychology*, 18, 105–115.
- Deci, E.L. (1975). *Intrinsic motivation*. Springer.

- Deci, E.L., & Ryan, R.M. (1985). Toward an organismic integration theory. In: *Intrinsic motivation and self-determination in human behavior*. Springer. [https://doi.org/10.1007/978-1-4899-2271-7\\_5](https://doi.org/10.1007/978-1-4899-2271-7_5)
- de Jong, J. & den Hartog, D. (2008). Measuring innovative work behavior. *Creativity and Innovation Management*, 19(1). <https://doi.org/10.1111/j.1467-8691.2010.00547.x>
- De Spiegelaere, S., Van Gyes, G., & Van Hootegem, G. (2014). Innovatief Werkgedrag als concept: definiëring en orientering (The Innovative Work Behavior concept: definition and orientation). *Gedrag & Organisatie*, 27(2), 139–156.
- Diebig, M., Bormann, K. C., & Rowold, J. (2017). Day-level transformational leadership and followers' daily level of stress: A moderated mediation model of team cooperation, role conflict, and type of communication. *European Journal of Work and Organizational Psychology*, 26(2), 234–249.
- Dorenbosch, L., van Engen, M. L., & Verhagen, M. (2005). On-the-job Innovation: The impact of job design and human resource management through production ownership. *Creativity and Innovation Management*, 14(2), 129–141. <https://doi.org/10.1111/j.1476-8691.2005.00333.x>
- Duckworth, A.L., Peterson, C., Matthews, M.D., & Kelly, D.R. (2007). Grit: Perseverance and passion for long-term goals. *Journal of Personality and Social Psychology*, 9, 1087–1101.
- Duckworth, A. L., & Quinn, P. D. (2009). Development and validation of the short grit scale (Grit-S). *Journal of Personality Assessment*, 91, 166–174. <https://doi.org/10.1080/00223890802634290>.
- Dworkin, G. (1988). *The theory and practice of autonomy*. Cambridge University Press
- Effendy, G.P. & Sukmarani, S. (2021). The description of innovative work behavior in entrepreneurs. *Advances in Social Science, Education and Humanities Research*, 655.
- Elamalki, D., Kaddar, A. & Beniich, N. (2024). Impact of motivation on the job performance of public sector employees: the case of Morocco. *Future Business Journal*, 10, 53. <https://doi.org/10.1186/s43093-024-00342-4>
- Engidaw, A.E. The effect of motivation on employee engagement in the public sectors: in the case of North Wollo zone. *Journal of Innovation and Entrepreneurship*, 10, 43. <https://doi.org/10.1186/s13731-021-00185-1>
- Eskreis-Winkler, L., Gross, J. J., & Duckworth, A. L. (2016). *Grit: sustained self-regulation in the service of superordinate goals*, in *Handbook of Self-Regulation: Research, Theory and Applications*. 16, eds K. D. Vohs and R. F. Baumeister. Guilford, 380–395.
- Faez, F., Hamdan, A. & Abdulrasool, F. (2023). *The impact of the workplace environment on the employees' performance*. Springer Nature.
- Febriawan, I.M., & Maulina, D. (2019). Development of the employee grit (E-Grit) measurement: Dimensionality, convergent validity, and reliability. *Advances in Social Science, Education and Humanities Research*, 494.

- Fernández-Aráoz, C. (2014). 21st-Century talent spotting. *Harvard Business Review*, 92, 46–54.
- Filipova, A.A. (2016). Expectancy theory in organizations. In: Farazmand, A. (eds) *Global Encyclopedia of Public Administration, Public Policy, and Governance*. Springer. [https://doi.org/10.1007/978-3-319-31816-5\\_3002-1](https://doi.org/10.1007/978-3-319-31816-5_3002-1)
- Forson, J.A., Ofosu-Dwamena, E., & Opoku, R.A. (2021). Employee motivation and job performance: a study of basic school teachers in Ghana. *Future Business Journal*, 7, 30. <https://doi.org/10.1186/s43093-021-00077-6>
- Gagne, M. & Deci (2005). Self-determination theory and work motivation. *Journal of Organizational Behavior*, 26, 331–362. <https://doi.org/10.1002/job.322>
- Hancock, P.A. (1987). Arousal theory, stress, and performance: Problems of incorporating energetic aspects of behavior into human-machine systems. In: Mark, L.S., Warm, J.S., Huston, R.L. (eds) *Ergonomics and human factors*. Springer. [https://doi.org/10.1007/978-1-4612-4756-2\\_17](https://doi.org/10.1007/978-1-4612-4756-2_17)
- Harrell, A. M., & Stahl, M. J. (1981). A behavioral decision theory approach for measuring McClelland's trichotomy of needs. *Journal of Applied Psychology*, 66, 242–247
- Herzberg, F. (1965). *The motivation to work among Finnish supervisors*. *Personnel Psychology*, 18, 393–402.
- Herzberg, F., Mausner, B., & Snyderman, B. (1959). The motivation to work. *Personnel Psychology*, 18, 393–402
- Hirst, G., van Knippenberg, D., & Zhou, J. (2009). A cross-level perspective on employee creativity: Goal orientation, team learning behavior, and individual creativity. *Academy of Management Journal*, 52(2), 280–293.
- Hochanadel, A., & Finamore, D. (2015). Fixed and growth mindsets in education and how grit helps students persist in the face of adversity. *Journal of International Education Research*, 11(1), 47-50.
- Hull, C. (1943). *Principles of Behavior*. Appleton
- Isaksen, S. G., Lauer, K. J., & Ekvall, G. (1999). Situational outlook questionnaire: A measure of the climate for creativity and change. *Psychological reports*, 85(2), 665-674.
- Janssen, O. (2000). Job demands, perceptions of effort-reward fairness and innovative work behavior. *Journal of Occupational and Organizational Psychology*, 73(3), 287–302. <https://doi.org/10.1348/096317900167038>
- Jin, B., & Kim, J. (2017). Grit, basic needs satisfaction, and subjective well-being. *Journal of Individual Differences*, 38(1), 29–35. <https://doi.org/10.1027/1614-0001/a000219>
- Jonsson, T.F. & Kahler, H.G. (2022). The savvy and cheerful employee innovation champions: The roles of political skill and trait-positive affect in employees' championing and salary levels. *Creativity and Innovation Management*, 31(2). <https://doi.org/10.1111/caim.12496>

- Jordan, S. L., Ferris, G. R., Hochwarter, W. A., & Wright, T. A. (2019). Toward a work motivation conceptualization of grit in organizations. *Group and Organization Management*, 44(2), 320–360.
- Kabir, M.N. (2019). Innovation. In: *Knowledge-Based Social Entrepreneurship*. Palgrave Macmillan. [https://doi.org/10.1057/978-1-137-34809-8\\_6](https://doi.org/10.1057/978-1-137-34809-8_6)
- Kawasaki, K., Inui, T. & Miyagawa, T. (2022). The effect of management practices on the performance of bus enterprises. *International Journal of Economic Policy Studies*, 17, 133–161. <https://doi.org/10.1007/s42495-022-00097-2>
- Kinley, N., Ben-Hur, S. (2020). *Motivation*. In: *Leadership OS*. Palgrave Macmillan. [https://doi.org/10.1007/978-3-030-27293-7\\_13](https://doi.org/10.1007/978-3-030-27293-7_13)
- Kleinbeck, U. (1987). The effects of motivation on job performance. In: Halisch, F., Kuhl, J. (eds) *Motivation, intention, and volition*. Springer. Heidelberg. [https://doi.org/10.1007/978-3-642-70967-8\\_18](https://doi.org/10.1007/978-3-642-70967-8_18)
- Kleysen, R.F. & Street, C.T. (2001). Toward a multidimensional measure of individual innovative behavior. *Journal of Intellectual Capital*, 2(3), 284–296.
- Kristinsson, K., Gudjonsson, S., & Kristjansdottir, B. (2023). Tough times require tough people: The benefits of grit for reducing employee burnout. *Int J Environ Res Public Health*. 2023 Jun 1;20(11):6024. [Htps://doi.org/10.3390/ijerph20116024](https://doi.org/10.3390/ijerph20116024).
- Kumari, J., & Kumar, J. (2023). Influence of motivation on teachers' job performance. *Humanities and Social Sciences Communications*, 10, 158. <https://doi.org/10.1057/s41599-023-01662-6>
- Lee, J. & Park, J (2023). The role of grit in inclusive education: a study of motivation and achievement among preservice physical education teachers. *Frontiers in Psychology*, 15, 1332464. <https://doi.org/10.3389/fpsyg.2024.1332464>
- Lee, J. (2022). The role of grit in organizational performance during a pandemic. *Frontier in Psychology*, 13, 929517. <https://doi.org/10.3389/fpsyg.2022.929517>
- Legault, L. (2016). Intrinsic and extrinsic motivation. In: Zeigler-Hill, V., Shackelford, T. (eds) *Encyclopedia of Personality and Individual Differences*. Springer. [https://doi.org/10.1007/978-3-319-28099-8\\_1139-1](https://doi.org/10.1007/978-3-319-28099-8_1139-1)
- Leong, C.T. & Rasli, A. (2017). The relationship between innovative work behavior and work role performance: An empirical study. *Procedia - Social and Behavioral Sciences*, 129, 592 – 600. <https://doi.org/doi.org/10.1016/j.sbspro.2014.03.717>
- Locke, E.L. (1978). The technique of goal setting is ubiquitous in theories of and approaches to employee motivation. *Academy of Management Review* 3, 594–601;
- Madsen, S.R., & Wilson, I.K. (2012). Humanistic theory of learning: Maslow. In: Seel, N.M. (eds) *Encyclopedia of the sciences of learning*. Springer. [https://doi.org/10.1007/978-1-4419-1428-6\\_1022](https://doi.org/10.1007/978-1-4419-1428-6_1022)

- Männel, C., Schaadt, G., Franziska K. I., van der Meer, E. & Friederici, A.D. (2014). Phonological abilities in literacy-impaired children: Brain potentials reveal deficient phoneme discrimination, but intact prosodic processing. *Developmental Cognitive Neuroscience*, 23, 14-25. <https://doi.org/10.1016/j.dcn.2016.11.007>.
- Maslow, A. H. (1943). *A theory of human motivation*. *Psychological Review*, 50, 370–396.
- Maslow, A. H. (1954). *Motivation and personality*. Harper.
- McClelland, D. C., & Burnham, D. H. (1976). Power is a great motivator. *Harvard Business Review*, 54, 100–111
- Meriac, J. P., Slifka, J. S., & LaBat, L. R. (2015). Work ethic and grit: An examination of empirical redundancy. *Personality and Individual Differences*, 86, 401–405. <https://doi.org/10.1016/j.paid.2015.07.009>
- Mlynek, M., Mühlböck, M. & Steiber, N. (2025). Out of work, out of spirit? The effects of unemployment duration on young people's intrinsic work motivation. *Social Indicators Research*, 179(3). <https://doi.org/10.1007/s11205-025-03709-4>
- Morris, L. S., Grehl, M. M., Rutter, S. B., Mehta, M., & Westwater, M. L. (2022). On what motivates us: a detailed review of intrinsic v. extrinsic motivation. *Psychological medicine*, 52(10), 1801–1816. <https://doi.org/10.1017/S0033291722001611>
- Navy, S.L. (2020). Theory of human motivation—Abraham Maslow. In: Akpan, B., Kennedy, T.J. (eds) *Science education in theory and practice*. Springer. [https://doi.org/10.1007/978-3-030-43620-9\\_2](https://doi.org/10.1007/978-3-030-43620-9_2)
- Nguyen, H.T.N., Nguyen, H.T.T., Truong, A.T.L., Nguyen, T.T.P., & Nguyen, A.V. (2021). Entrepreneurial culture and innovative work behavior: the mediating effect of psychological empowerment. *Journal of Entrepreneurship in Emerging Economies*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/JEEE-04-2021-0132>
- Parnitvitidkun, P., Ponchaitiwat, K., Chancharat, N. & Thoumrungroje, A. (2024). Understanding IT professionals' innovative work behavior in the workplace: A sequential mixed-methods design. *Journal of Open Innovation: Technology, Market, and Complexity*, 10(1), 100231. <https://doi.org/10.1016/j.joitmc.2024.100231>
- Pham, T.P.T., Nguyen, T.V., Phuong Van Nguyen, P.V., & Ahmed, Z. (2024). The pathways to innovative work behavior and job performance: Exploring the role of public service motivation, transformational leadership, and person-organization fit in Vietnam's public sector. *Journal of Open Innovation: Technology, Market, and Complexity*, 10(3), 100315. <https://doi.org/10.1016/j.joitmc.2024.100315>.
- Pinder, C.C. (1984). *Work motivation: Theory, issues, and applications*. Scott Foresman
- Poppelaars, M., Tak, Y.R., Lichtwarck-Aschof, A., Engels, R.C.M.E, Lobel, A., Merry, S.N., Lucassen, M.F.G., & Granic, I. (2014). Autonomous and controlled motivation in a randomized controlled trial comparing school-based and computerized depression prevention programs. In: Schouten, B., Fedtke, S., Schijven, M.,

- Porter, L. W., & Lawler, E. E. (1968). *Managerial attitudes and performance*. Dorsey Press.
- Purwanto, A. (2020). The impacts of leadership and culture on work performance in a service company, and innovative work behavior as a mediating effect. *Journal of Research in Business, Economics, and Education*, 2(1).
- Raisal, I., Nawaz, N., Appasammy, K. & Gajenderan, V. (2021). Effect of work motivation on employee job satisfaction in the context of a public sector organization. *Journal of Hunan University Natural Sciences*, 48(11).
- Rego, A., Cavazotte, F., Cunha, M. P., Valverde, C., Meyer, M., & Giustiniano, L. (2021). Gritty leaders promote employees' thriving at work. *Journal of Management*, 47(5), 1155–1184. <https://doi.org/10.1177/0149206320904765>
- Remley, N.R. (1980). J.B. Watson and J.J.B. Morgan: The original theory of motivation. *Bulletin of the Psychonomic Society*, 16(4), 314–316.
- Richter, A. W., Hirst, G., Van Knippenberg, D., & Baer, M. (2012). Creative self-efficacy and individual creativity in team contexts: cross-level interactions with team informational resources. *Journal of Applied Psychology*, 97(6), 1282.
- Robins, A.G. (2022). Measuring grit as a predictor of academic success among African American male students in STEM programs at predominantly white institutions in Western Pennsylvania. *Young, Gifted and Missing (Diversity in Higher Education)*, 25. <https://doi.org/10.1108/S1479-364420220000025001>
- Ryan, R.M. & Deci, E. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective: Definition, theory, practices, and future directions. *Contemporary Educational Psychology*, 2020. Institute for Positive Psychology and Education, Australian Catholic University.
- Ryan, R.M. & Deci, E.L. (2022). *Self-determination theory*. Springer Nature Switzerland.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68–78. <https://doi.org/10.1037/0003-066X.55.1.68>
- Ryan, R.M., & Deci, E.L. (2002). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychology*, 55, 68-78
- Saif, N., Goh, A.G.G., Rubin, A., Shaheen, I. & Murtaza, M (2024). Influence of transformational leadership on innovative work behavior and task performance of individuals: The mediating role of knowledge sharing. *Heliyon*, 10(11), e32280. <https://doi.org/10.1016/j.heliyon.2024.e32280>.

- Sandvik, E., Diener, E. & Larsen, R.J. (1985). The opponent process theory and affective reactions. *Motivation and Emotion*, 9, 407–418. <https://doi.org/10.1007/BF0099>
- Schröder, M. (2023). Work motivation is not a generational phenomenon; rather, it depends on age and the time period. *Journal of Business and Psychology*, 39, 897–908. <https://doi.org/10.1007/s10869-023-09921-8>
- Scott, W. G. (1961). Organization theory: An overview and an appraisal. *The Journal of the Academy of Management*, 4(1), 7–26. <https://doi.org/10.2307/254584>
- Scott, S. G., & Bruce, R. A. (1994). Determinants of innovative behavior: A path model of individual innovation in the workplace. *Academy of Management Journal*, 37(3), 580-607. <https://doi.org/10.2307/256701>
- Scott, S. G., & Bruce, R. A. (1998). Following the leader in R&D: the joint effect of subordinate problem-solving style and leader-member relations on innovative behavior. *Engineering Management, IEEE Transactions*, 45(1), 3– 10. <https://doi.org/10.1109/17.658656>
- Senda, N. (2025). Motivation. In: Kambayashi, N. (eds) *Human resource management in Japan*. Springer. [https://doi.org/10.1007/978-981-96-7014-7\\_2](https://doi.org/10.1007/978-981-96-7014-7_2)
- Sewandono, R.E., Thoyib, A., Hadiwidjojo, D. & Rofiq, A. (2023). Performance expectancy of E-learning in higher institutions of education under uncertain conditions: Indonesian context. *Education and Information Technology*, 28, 4041–4068. <https://doi.org/10.1007/s10639-022-11074-9>
- Shanker, R., Bhanugopan, R., van der Heijden, B.I.J.M., & Farrell, M. (2017). Organizational climate for innovation and organizational performance: The mediating effect of innovative work behavior. *Journal of Vocational Behavior*, 2(4). <https://doi.org/10.1016/j.jvb.2017.02.004>
- Simon, H. (2009). Innovation. In: *Hidden champions of the twenty-first Century*. Springer. [https://doi.org/10.1007/978-0-387-98147-5\\_6](https://doi.org/10.1007/978-0-387-98147-5_6)
- Skinner, B.F. (1953). *Science and human behavior*. Free Press;
- Spangler, W. D., & House, R. J. (1991). Presidential Effectiveness and the Leadership Motive Profile. *Journal of Personality and Social Psychology*, 60, 439–455. <https://doi.org/10.1037/0022-3514.60.3.439>.
- Spreitzer, G. (1995). Psychological empowerment in the workplace: Dimensions, measurement, and validation. *Academy of Management Journal*, 38(5), 1442–1465. <https://doi.org/10.5465/256865>
- Srirahayu, D.P., Ekowati, D. & Sridadi, A.R. (2023). Innovative work behavior in public organizations: A systematic literature review. *Heliyon*, 9(2), e13557. <https://doi.org/10.1016/j.heliyon.2023.e13557>
- Tang, X., Wang, M.T., & Parada, F. (2021). Putting the goal back into grit: Academic goal commitment, grit, and academic achievement. *Journal of Youth Adolescence* 50, 470–484. <https://doi.org/10.1007/s10964-020-01348-1>
- Taylor, F.W. (1911). *The principles of scientific management*. Norton

- Trevis, C. S., & Certo, S. C. (2005). Spotlight on entrepreneurship. *Business Horizons*, 48, 271–274.
- Turban, D. B., & Keon, T. L. (1993). Organizational attractiveness: An interactionist perspective. *Journal of Applied Psychology*, 78, 184–19
- Urhahne, D., & Wijnia, L. (2023). Theories of motivation in education: An integrative framework. *Educational Psychology Review*, 35, 45. <https://doi.org/10.1007/s10648-023-09767-9>
- Uzun, B., & Aydemir, A. (2020). Introjected regulation. In: Zeigler-Hill, V., Shackelford, T.K. (eds) *Encyclopedia of personality and individual differences*. Springer. [https://doi.org/10.1007/978-3-319-24612-3\\_690](https://doi.org/10.1007/978-3-319-24612-3_690)
- van Zyl, L.E., Olckers, C., & van der Vaart, L. (2023). *Multidisciplinary perspective on grit*. Springer.
- Vroom, V. H. (1964). *Work and motivation*. Wiley.
- Wahyuningsih, S.H. & Hafid, A. (2025). The influence of innovation climate and motivation on employee performance through innovative behavior as a mediating variable. *Development Management*, 24(1), 57-66. <https://doi.org/10.63341/devt/1.2025.57>
- Wang, S., Zhou, M., Chen, T., Yang, X., Chen, G., Wang, M., & Gong, Q. (2017). Grit and the brain: spontaneous activity of the dorsomedial prefrontal cortex mediates the relationship between the trait grit and academic performance. *Social cognitive and affective neuroscience*, 12(3), 452-460.
- Wang, X., Guchait, P., & Paşamehmetoğlu, A. (2020). Why should errors be tolerated? Perceived organizational support, organization-based self-esteem, and psychological well-being. *International Journal of Contemporary Hospitality Management*, 32(5), 1987-2006.
- Wang, N., Luan, Y. & Ma, R. (2024). Detecting causal relationships between work motivation and job performance: a meta-analytic review of cross-lagged studies. *Humanities and Social Sciences Communications*, 11, 595. <https://doi.org/10.1057/s41599-024-03038-w>
- Weber-Kramer, J. (2023). Motivation. In: Hou, N., Tan, J.A., Valdez Paez, G. (eds) *Organizational behavior*. Springer. [https://doi.org/10.1007/978-3-031-31356-1\\_3](https://doi.org/10.1007/978-3-031-31356-1_3)
- West, M. A., & Farr, J. L. (1990). *Innovation and Creativity at Work*. John Wiley
- Williams, G. C., Grow, V. M., Freedman, Z. R., Ryan, R. M., & Deci, E. L. (1996). Motivational predictors of weight loss and weight-loss maintenance. *Journal of Personality and Social Psychology*, 70, 115–126
- Wong, M. M., & Csikszentmihalyi, M. (1991). Affiliation motivation and daily experience: Some issues on gender differences. *Journal of Personality and Social Psychology*, 60, 154–164.
- Xu, Z., & Suntrayuth, S. (2022). Innovative work behavior in high-tech enterprises: Chain intermediary effect of psychological safety and knowledge sharing. *Frontiers in psychology*, 13, 1017121. <https://doi.org/10.3389/fpsyg.2022.1017121>

- Yerkes, R.M., & Dodson, J.D. (1908). The Relation of Strength of Stimulus to Rapidity of Habit Formation. *Journal of Comparative Neurology & Psychology*, 18, 459–482. <https://doi.org/10.1002/cne.920180503>
- Yesuf, Y.M., Getahun, D.A. & Debas, A.T. Factors affecting “employees’ creativity”: the mediating role of intrinsic motivation. *Journal of Innovation and Entrepreneurship*, 12, 31. <https://doi.org/10.1186/s13731-023-00299-8>
- Younas, A., Wang, D., Javed, B., & Zaffar, M. A. (2021). Moving beyond the mechanistic structures: The role of inclusive leadership in developing change-oriented organizational citizenship behavior. *Canadian Journal of Administrative Sciences/Revue Canadienne des Sciences de l'Administration*, 38(1), 42-52.
- Yuan, H., Li, Y., & Zheng, J. (2022). The impact of inclusive leadership on employees’ innovative behaviors in Chinese Internet technology companies: the mediating role of error management climate and self-efficacy. *Korean Acad Leadersh*, 13(2), 39-65.
- Zhao, W., Shi, X., Jin, M., Li, Y., Liang, C., Ji, Y., Cao, J., Oubibi, M., Li, X., & Tian, Y. (2024). The impact of a growth mindset on high school students' learning subjective well-being: the serial mediation role of achievement motivation and grit. *Frontiers in Psychology*, 15, 1399343. <https://doi.org/10.3389/fpsyg.2024.1399343>
- Zhu, Y., Dolmans, D., Köhler, S.E., Kusrkar, R.A., Abidi, L. & Savelberg, H. (2024). Paths to autonomous motivation and well-being: Understanding the contribution of basic psychological needs satisfaction in health professions students. *Medical.Science.Educator*, 34, 1331–1342. <https://doi.org/10.1007/s40670-024-02106-9>
- Zyl, L.E., van Vuuren, M., Roll, L.C. & Stander, M.W. (2022). Person-Environment Fit and Task Performance: Exploring the Role (s) of Grit as a Personal Resource. *Current Psychology*, 42(27). <https://doi.org/10.1007/s12144-022-03461-9>

**Publisher’s Note:** DWIJMH stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



© 2025 by the authors. Licensee DWIJMH. This article is an open access article distributed under the terms and conditions of the [Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License](https://creativecommons.org/licenses/by-nc-sa/4.0/) (<https://creativecommons.org/licenses/by-nc-sa/4.0/>)

Divine Word International Journal of Management and Humanities. DWIJMH is licensed under a Creative Commons Attribution 4.0 International License.