



Nurturing a competitive attitude to enhance work performance and innovative work behavior of the employees

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ABSTRACT

This study aimed to examine the influence of competitive attitude on individual work performance and innovative work behavior. To establish a strong conceptual foundation, relevant literature was reviewed to deepen the understanding of the key constructs. The research employed an assessment and correlational design to explore the relationships among variables. The population of the study comprised all employees within the institution where the research was conducted. Given this context, a total enumeration sampling technique was adopted to ensure comprehensive representation. Data was collected using structured questionnaires, and both descriptive and inferential statistics were utilized for analysis.

The results indicated that employees demonstrated a moderate level of competitive attitude, while individual work performance and innovative work behavior were rated high. The Pearson correlation coefficient revealed a significant and positive relationship between competitive attitude, individual work performance, and innovative work behavior. Based on these findings, the study's hypothesis was accepted.

Despite its contributions, the study acknowledges certain limitations, particularly the confined scope of the population and the limited range of variables examined. It recommends that future research should incorporate a broader and more diverse population, along with additional variables that more comprehensively capture the dimensions of competitive attitude and its impact on innovative work behavior.

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Introduction

Competition defines today's business environment, where companies no longer operate as monopolies but must contend with others offering similar products or services in the pursuit of greater success (Alzamora, 2023). In such a competitive landscape, organizational success depends heavily on the optimal functioning of human resources.

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Achieving this success requires both high task and contextual performance. However, performance is not solely determined by employees' knowledge and skills—it also hinges on their attitudes toward work and competition (Núñez et al., 2024).

Research by Abun et al. (2021) and Kammeyer-Mueller et al. (2023) highlights a positive correlation between employees' attitudes toward work and their level of engagement. Similarly, Ma and Chen (2024) underscore the significant role that a competitive attitude plays in motivating task performance and driving better outcomes.

To thrive in a competitive environment, both organizations and employees must embrace competition. This involves cultivating a mindset that is oriented toward outperforming others (Chen, 2016). Employees need to adopt a competitive attitude and behavior as a new way of thinking—one where the focus is on achieving superior results. In doing so, they are encouraged to exhibit proactive behaviors, embrace entrepreneurial orientation, and view competition positively rather than as a threat (Covin & Wales, 2012). According to Yang and Meyer (2019), competition should be seen as a motivating challenge that promotes work behaviors leading to higher performance. In such a business environment, adopting a competitive attitude is not optional. A competitive attitude is defined as the tendency to compete with oneself and others over a given objective (Klein & Newby, 2017). This means developing a mindset geared toward outperforming competitors, preparing to win, and viewing competition as an inherent part of business survival. Organizations and employees alike must recognize that they are not alone in the marketplace. Success depends on understanding competitors—their strategies, products, and services—and then differentiating one's own offerings accordingly (Houston & Queen, 2020).

Despite the importance of competition, existing literature has largely overlooked the critical role of competitive attitude in enhancing both work performance and innovative work behavior. This study seeks to address that gap by examining the effect of competitive attitude on individual work performance and innovative behavior. According to Koopmans et al. (2014), individual work performance refers to employee actions or behaviors that contribute to organizational goals. Innovative work behavior, as described by AIEssa and Durugbo (2021), involves the generation, introduction, and implementation of new ideas to enhance performance and support organizational success.

The study is organized into several key sections. The first is the introduction, which outlines the background and objectives of the research. The second is the literature review, which explores existing studies on competitive attitude, competition, work performance, and innovative work behavior. The third section details the research methodology, including the research design, population, study locale, procedures, instruments, ethical considerations, and data analysis methods. This is followed by data presentation and analysis, and finally, the discussion and conclusion.

Literature review

The attitude and behavior relationship controversy

In today's business landscape, competition defines the environment in which companies operate. Few businesses enjoy monopolistic conditions; instead, they must compete with others offering similar products or services, all striving to outperform one another (Alzamora, 2023). In such a competitive context, organizational success is unattainable without high-functioning human resources. Achieving success demands not only strong task and contextual performance but also employees who possess the right mindset toward their work and competition (Núñez et al., 2024).

Research by Abun et al. (2021) and Kammeyer-Mueller et al. (2023) emphasizes a positive correlation between employees' attitudes toward their work and their level of engagement. Similarly, Ma and Chen (2024) highlight the significant role of a competitive attitude in motivating individuals to perform tasks more effectively.

Thriving in a competitive work environment requires both organizations and employees to embrace and adapt to competition. According to Chen (2016), a competitive mindset must be deliberately cultivated. Employees are encouraged to adopt competitive attitudes and behaviors as a new approach to work—aiming not just to perform, but to outperform. This orientation includes proactive behavior, entrepreneurial thinking, and a readiness to view competition not as a threat, but as an opportunity for growth and excellence (Covin & Wales, 2012). Yang and Meyer (2019) further argue that competition should be seen as a motivating challenge that drives improved work outcomes.

In such an environment, employees have little choice but to develop a competitive attitude. Klein and Newby (2017) define this as the tendency to compete—either individually or collectively—toward achieving a goal. In essence, this mindset means embracing competition and preparing to succeed in a competitive field. It implies a strategic awareness: both organizations and employees must recognize that they are not alone in the market. To survive and thrive, they must understand their competitors, analyze their strategies, and position their own offerings to stand out (Houston & Queen, 2020).

Despite the growing recognition of competition's importance, the literature reveals a noticeable gap: the role of competitive attitude in enhancing both work performance and innovative behavior has not been thoroughly examined. To address this, the current study aims to explore the impact of competitive attitude on individual work performance and innovative work behavior.

Individual work performance refers to behaviors and actions by employees that align with and support organizational goals (Koopmans et al., 2014). Innovative work behavior, on the other hand, involves the generation, introduction, and application of new ideas to improve work processes and achieve desired outcomes (AlEssa & Durugbo, 2021).

This study is structured into several sections. The first provides an introduction, including background and research objectives. The second reviews existing literature on competitive attitude, competition, work performance, and innovative work behavior. The third outlines the research methodology, including research design, population, study location, procedures, instruments, ethical considerations, and data analysis techniques. The fourth presents and analyzes the data, and the final section discusses the findings and offers conclusions.

Competitive attitude

In today's dynamic and fast-paced business world, competition is a defining feature of the market. Gone are the days when one company could dominate an industry unchallenged. Now, numerous businesses operate in the same sectors, offering comparable products and services. Success is no longer determined simply by being present in the market—it is earned through strategic positioning and differentiation (Deszczyński, 2021; Rajagopal, 2012). Companies must closely monitor their competitors, understand their strategies, and learn from them to develop superior offerings (Homburg et al., 2012). The ultimate aim is clear: to outperform the competition and emerge as a market leader.

Achieving this goal, however, requires more than just innovation and strategic insight. It demands a certain mindset—one that is focused, determined, and inherently competitive. Whether in boardrooms or on the shop floor, every employee must develop the internal drive to compete and succeed. According to Klein and Newby (2017), this involves more than simply recognizing competition; it means adopting a competitive attitude—a mindset oriented toward outperforming others and striving for excellence.

This idea of a competitive attitude is often misunderstood. People frequently use the terms “competition” and “competitiveness” interchangeably, though they refer to different concepts. As Klein and Newby (2017) clarify, competition is an external conflict over limited resources, while competitiveness is an internal trait—a psychological tendency to compete. It is a personality-driven characteristic that reflects a person’s desire to surpass others and win, either individually or as part of a team (Houston & Queen, 2017; 2020).

This internal desire can be a powerful motivator, but it also has a darker side. The extreme form of competitiveness—known as hyper-competitiveness—was first described by Horney (1937) and later operationalized in a measurement scale by Ryckman et al. (1990). Hypercompetitive individuals are driven by an intense, often unhealthy desire to win at any cost. As Lakie (1964) noted, this mindset can lead to manipulative, aggressive, or exploitative behaviors, all in the service of boosting one’s self-worth. Scholars like Aronson (1980) and Kohn (1986) have even linked this tendency to potential mental health issues and social dysfunction, with studies showing that hypercompetitive people often display high levels of dogmatism and mistrust (Ryckman et al., 1990).

Because of these complexities, researchers have increasingly explored the positive and negative dimensions of competitive attitude. Some scholars argue that competitive orientation, when harnessed positively, can significantly enhance performance across a range of fields. In business, employees with a strong competitive drive often put more effort into their work and deliver better results (Eber et al., 2021; Wang et al., 2018; Wang et al., 2024). Similarly, in education and sports, competitive attitudes have been linked to improved academic and athletic outcomes (Payne, 2010; Alahmed et al., 2017; Wongvorachan, 2023; Li, 2022).

Despite this recognition, most existing tools for measuring competitive attitude are limited in scope. Historically, measurement scales—such as Horney’s hypercompetitive scale or Martin and Larsen’s Competitive-Cooperative Attitude Scale—have approached competitiveness as a single-dimensional construct (Ryckman et al., 1990; 1996; 2009). However, this narrow approach fails to capture the full spectrum of competitive behaviors and motivations, particularly across diverse settings like education, healthcare, business, and sports (Orosz et al., 2018).

To address this, researchers have developed more nuanced frameworks that treat competitive attitude as a multidimensional construct. Menesini et al. (2018), for instance, proposed two core dimensions: Hypercompetitive Competitive Attitude (HCA) and Personal Development Competitive Attitude (PDCA). While originally viewed as separate, subsequent studies confirmed that these dimensions are positively correlated, indicating they are both integral to understanding competitive behavior (Houston et al., 2002; Collier et al., 2010; Ryska, 2002).

Building on this work, Orosz et al. (2018) introduced a more comprehensive model with four distinct dimensions. These include:

- **Hypercompetitive Orientation** – A relentless drive to win, often marked by aggressive or unethical behavior. This type of attitude can lead to negative outcomes such as maladaptive perfectionism and stress.
- **Self-Developmental Competitive Orientation** – A healthier approach focused on personal growth and improvement. Individuals with this mindset tend to exhibit resilience, optimism, and positive motivation.
- **Anxiety-Driven Competition Avoidance** – A defensive attitude rooted in fear of competition. People with this orientation may shy away from challenges and lack the persistence to pursue long-term goals.
- **Lack of Interest in Competition** – Apathy toward competitive environments, often resulting in low engagement and effort (Orosz et al., 2018).

The present study adopts this four-dimensional framework by Orosz et al. (2018) to assess the competitive attitudes of employees within educational institutions. By doing so, it aims to capture the full complexity of how competitive orientation shapes workplace behavior. A hypercompetitive attitude, while potentially motivating, can lead to negative interpersonal dynamics. In contrast, a self-developmental orientation may foster resilience and drive

positive outcomes. Meanwhile, avoidance or indifference toward competition may hinder individual and organizational progress.

In exploring these dimensions, this research seeks to better understand how competitive attitudes influence performance and innovation in the workplace—and ultimately, how fostering the right kind of competitiveness can lead to sustainable success.

Individual work performance

Individual work performance is a central concern for management, as the success of any organization largely depends on the performance of its employees. Consequently, one of management's key responsibilities is to regularly monitor and evaluate employee performance to identify any deviations from organizational objectives at the earliest possible stage. Regular or real-time performance evaluations are essential to assess whether employees are effectively executing their tasks and whether their contributions are aligned with organizational goals (Armstrong, 2015; Murphy et al., 2019).

Despite its importance, there is no scholarly consensus on the precise dimensions of work performance, largely due to the lack of a uniform definition (Dallas, 2005). This lack of agreement leads to ambiguity regarding what aspects of performance should be measured, as various scholars propose overlapping but distinct dimensions. For instance, Motowidlo (2003) conceptualized job performance as the total expected value to the organization of the discrete behavioral episodes an individual carries out over a given period. His definition underscores performance as the outcome of behaviors that support the achievement of organizational goals, echoing earlier work by Campbell (1990). In alignment with this view, Gulino (2022) defined work performance as “the total of a worker's execution of assigned tasks,” while Turanlıgil (2019) similarly described it as the overall expected value derived from employees' behaviors over time. These definitions collectively emphasize performance as the behavioral output of work-related activities.

Contemporary scholars also align with Campbell's (1990) behavioral perspective on performance. Campbell defined individual work performance as actions relevant to organizational objectives, clarifying that performance is about behavior—not outcomes—since results often fall outside an employee's control (Campbell, 2013b). This behavioral focus has influenced recent definitions by Kasemsap (2016), who described work performance as job-related activities and their execution quality, Ahmad (2011), who viewed it as the ability to perform job duties, and Karapinar (2017), who characterized it as an appraisal of how well job tasks are fulfilled. These definitions reinforce the idea that performance should be measured based on observable behaviors, not outcomes.

This consensus on the behavioral nature of work performance addresses earlier concerns about what to evaluate. However, given the abstract and broad nature of the concept, the question remains: what specific behaviors constitute work performance? To enable effective measurement, these behaviors need to be clearly identified (Viswesvaran, 2002).

The initial attempt to define performance dimensions came from Campbell in the 1980s, focusing on the military context (Campbell et al., 2001). He initially proposed five dimensions: physical fitness and military bearing, technical performance, peer leadership, supervisory leadership, extra-effort/initiative, and personal discipline. Among these, only one was uniquely military-specific, while the others had broader applicability. Later, Campbell et al. (1993) expanded these to eight dimensions: job-specific technical proficiency, non-job-specific technical proficiency, communication, demonstrated effort and initiative, personal discipline, facilitating peer and team performance, supervision/leadership, and management/administration.

Building on Campbell's work, Borman and Motowidlo (1993, 1997) categorized performance into two broad dimensions: task performance (core job responsibilities) and contextual performance (behaviors that support the organizational environment). Organ (1988) also contributed by introducing organizational citizenship behavior as a critical element of contextual performance. However, these dimensions still did not fully capture the range of workplace behaviors. To address this, scholars such as Bennett and Robinson (2000), Berry et al. (2007), Gruys and Sackett (2003), and Dallas (2005) introduced a third dimension: counterproductive work behavior (CWB), which includes actions that harm the organization or its members.

Synthesizing prior models, Koopmans et al. (2011) proposed three core components of individual work performance: task performance, contextual performance, and counterproductive work behavior. Later, Koopmans et al. (2014) added adaptive performance as a fourth dimension. However, based on the scope and purpose of this study, only the three dimensions from Koopmans et al. (2011)—task performance, contextual performance, and counterproductive work behavior—will be considered, excluding adaptive performance.

- **Task Performance**
Borman and Motowidlo (1993), as cited by Silong et al. (2013), defined task performance as “the effectiveness with which job incumbents carry out activities that contribute to the organization’s technical core, either directly through technical processes or indirectly by providing necessary materials or services.” This view aligns with Campbell (1990), who termed it “task proficiency” or the ability to perform job functions competently. Task performance encompasses behaviors that directly affect task completion and are vital to the organization’s operational core. Possessing the requisite knowledge and skills is a fundamental expectation for executing assigned tasks (Harrison et al., 2006).
- **Contextual Performance:**
According to Dođru (2019), contextual performance refers to “the degree to which an employee behaves positively, including volunteering for extra duties, helping coworkers, and cooperating with them without expecting a reward.” Organ (1988) labeled such discretionary behaviors as organizational citizenship behaviors. Though not formally required, these actions foster a positive work environment and facilitate the execution of core tasks. Research has shown that contextual performance supports task performance (Diaz-Vilela et al., 2015) and enhances overall effectiveness (Griffin et al., 2001).
- **Counterproductive Work Behavior (CWB):**
Fox and Spector (2005) defined CWB as behaviors that undermine the organization’s objectives and harm coworkers. These can be directed toward the organization (e.g., theft, sabotage) or individuals (e.g., abuse, withdrawal) (Robinson & Bennett, 1995; Spector et al., 2006, as cited by Ispas & Borman, 2015). Within workgroups, CWB might manifest as laissez-faire leadership, violation of norms, disruption of relationships, or imposing personal values (Braun & Hentschel, 2015). These actions are often intentional and detrimental, driven by underlying motivations to weaken organizational performance.

Innovative work behavior

Scott and Bruce (1994, 1998) introduced the concept of innovative work behaviour (IWB), yet they did not provide a clear definition. Although numerous articles have since attempted to define IWB, De Spiegelaere et al. (2014) observed that most of these definitions closely follow the one provided by West and Farr (1990). According to West and Farr, IWB is defined as “the intentional introduction and application, within a role, group or organization, 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.”

Several scholars have reiterated similar definitions. For instance, Spreitzer (1995, p. 1449) describes IWB as “the creation of something new or different. Innovative behaviors are change-oriented because they involve the creation of a new product, service, idea, procedure, or process.” Janssen (2000, p. 288) offers a closely related definition,

referring to IWB 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.” Similarly, Dorenbosch et al. (2005, p. 129) define it as “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.” While these definitions provide slightly different wording, they largely echo West and Farr’s (1990) emphasis on novelty and intentionality, without introducing new conceptual dimensions.

However, De Spiegelaere et al. (2014, p. 11) argue that defining innovation purely in terms of novelty is insufficient, as novelty is result-dependent and only evident after implementation. Measuring IWB solely based on outcomes neglects key stages in the innovation process—such as idea generation and implementation—which are essential to understanding the construct. To address this limitation, De Spiegelaere et al. (2014) proposed a more comprehensive definition of IWB that includes the full innovation process. They define it as “all behaviours 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.”

This broader definition positions IWB as a multidimensional construct, encompassing idea generation, idea introduction, application, and the intended benefit. Each of these components is necessary for innovation but benefit alone is not sufficient to define IWB—it is the process that matters.

In terms of dimensions, de Jong and Den Hartog (2008) identified four distinct facets of IWB:

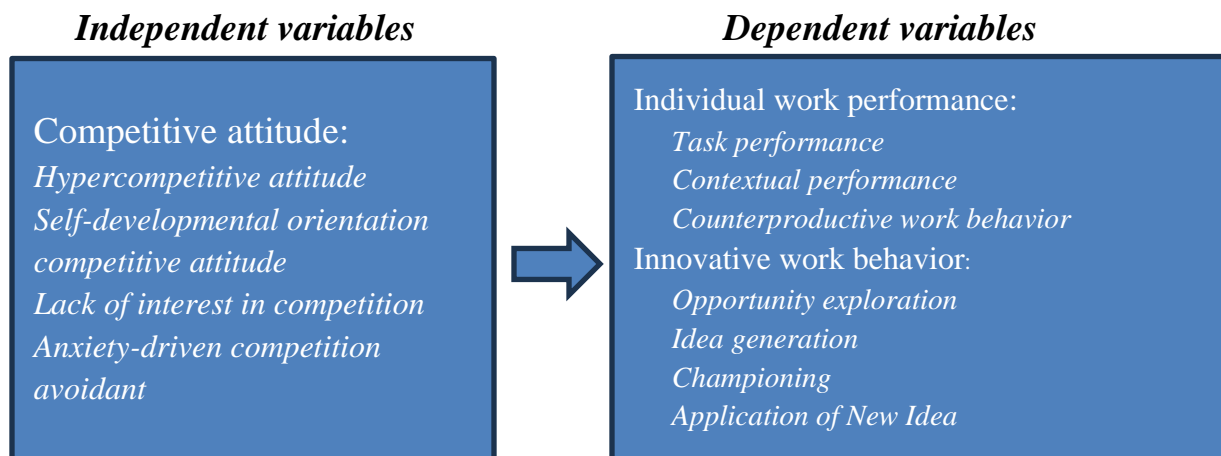
- Opportunity exploration – actively seeking improvements beyond routine tasks.
- Idea generation – developing novel methods, solutions, or approaches.
- Championing – promoting and gaining support for new ideas among key organizational members.
- Application – systematically integrating new ideas into work practices.

While their definition does not explicitly include the outcome or benefit, it sufficiently captures the core elements of IWB for the purposes of this study. The rationale is that innovation begins with exploration, continues through generation and advocacy, and culminates in application. Without these steps, the expected benefits cannot materialize. Therefore, benefit is treated consequently rather than a defining component of IWB.

The significance of innovative behavior in the workplace has been the focus of considerable research. Several studies have explored its impact on organizational performance. For instance, Shanker et al. (2017) found that IWB is a significant contributor to improved organizational performance. Since organizational performance stems from individual employee performance, this suggests that IWB directly enhances individual output, as also noted by Leong and Rasli (2013).

Moreover, IWB is influenced by various contextual factors, particularly the work environment. Nguyen et al. (2021) highlight the role of an entrepreneurial work culture in fostering innovation among employees. Supporting this, Purwanto (2020) emphasizes the need for organizations to evaluate whether their work environment motivates and supports innovation. Specifically, two environmental factors require focused attention: leadership and entrepreneurial culture, as these elements significantly affect employees’ willingness and ability to engage in innovative work behaviors.

Conceptual framework



Source: Erosz, et al. (2018), de Jong and Den Hartog (2008), Koopmans, et al. (2014).

Figure 1: The framework describes the relationship between competitive attitude, individual work performance and innovative work behavior. It indicates that a competitive attitude affects individual work performance and innovative work behavior.

Statement of the problems

The study examined the effect of competitive attitude on individual work performance and innovative work behavior. It specifically answered the following questions:

1. What is the competitive attitude of the employees in terms of:
 - a. hypercompetitive attitude
 - b. self-developmental orientation competitive attitude
 - c. lack of interest in competition
 - d. anxiety-driven competition avoidant
2. What is the work performance of the employees in terms of:
 - a. task performance
 - b. contextual performance
 - c. counterproductive work behavior
3. What is the level of innovative work behavior of employees in terms of:
 - a. Opportunity exploration
 - b. Idea generation
 - c. Championing
 - d. Application of new ideas
4. Is there a relationship between competitive attitude and individual work performance?
5. Is there a relationship between competitive attitude and innovative work behavior?

Hypothesis

Studies have noted the positive relationship between competitive attitude and achievement orientation and self-efficacy (Burkle, et al., 1999, Ma & Chen, 2024). The current study hypothesizes that competitive attitude affects individual work performance and innovative work behavior.

Scope and delimitation of the study

The study limits its investigation to the competitive attitude proposed by Erosz, et al. (2018) and work performance and innovative work behavior within their identified dimensions. The study covers only the employees of the Divine Word College of Laoag.

Research methodology

Scientific research must adhere to established procedures, commonly referred to as research methodology. The present study follows a clearly defined methodological framework. As noted by Wilkinson (2000) and Leedy (1974), research methodology constitutes a systematic process for conducting inquiry. It involves the application of specific methods to identify, select, and analyze data relevant to the research topic. In line with these principles, the current study employs a structured approach, including the determination of the research design, selection of data collection instruments, identification of the study population, specification of the study locale, outlining of data gathering procedures, and application of appropriate statistical techniques for data analysis.

Research design of the study

The research design employed in this study is a combination of descriptive assessment and descriptive correlational research. According to Ariola (2006), a descriptive correlational study aims to identify and describe relationships between variables without attempting to establish a cause-and-effect connection. In contrast, descriptive research is primarily concerned with providing an accurate portrayal of a population, situation, or phenomenon. It is commonly used to profile characteristics, determine frequency distributions, and outline the attributes of individuals, groups, or events. As McCombes (2020) explains, descriptive research seeks to answer the questions what, when, how, and where, but not why. This design is well-suited to studies that aim to observe and describe phenomena as they naturally occur, rather than manipulate variables or infer causality.

The locale of the study

The study was conducted at Divine Word College of Laoag, which is situated in Laoag City, the capital of Ilocos Norte.

Population

The respondents of the study were the employees of Divine Word College of Laoag. Given the limited number of employees, total enumeration sampling was employed, meaning all faculty and staff members of the college were included as participants in the study.

Data gathering instruments

The study utilized validated questionnaires from previous research: Erosz et al. (2018) for assessing competitive attitude, de Jong and Den Hartog (2008) for measuring innovative work behavior (IWB), and Koopmans et al. (2014) for evaluating individual work performance.

Data gathering procedures

To ensure the integrity of the research process, data collection began only after receiving approval from the college president. The researcher submitted a formal request letter to the president, and upon receiving approval, the questionnaires were distributed by a designated representative. The representative then collected the completed questionnaires and submitted them to the researcher for tabulation.

Ethical procedures

The study was conducted only after the research ethics committee reviewed and approved the content of the paper, ensuring that it adhered to ethical standards and did not pose any harm to human life or the environment.

Statistical treatment of data

To analyze the data, both descriptive and inferential statistics were employed. The weighted mean was used to assess the levels of competitive attitude, individual work performance, and innovative work behavior among employees, focusing on opportunity exploration, idea generation, championing, and the application of new ideas. The Pearson correlation coefficient (r) was utilized to examine the relationships between competitive attitude, innovative work behavior, and individual work performance. The following ranges of values with their descriptive interpretation were used:

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

Data presentation and analysis

The data are presented according to the statement of the problems of the study.

Problem 1: What is the competitive attitude of the employees in terms of:

- a. Hypercompetitive attitude***
- b. Self-developmental orientation competitive attitude***
- c. Lack of interest in competition***
- d. Anxiety-driven competition avoidant***

Table 1: Competitive attitude

Indicator	Mean	DI
Hypercompetitive attitude		
I am willing to do whatever it takes to win.	3.41	A/H
The most important is winning, no matter what	3.18	SWA/M
I will do anything to win, even nasty things	2.81	SWA/M
Composite Mean	3.13	SWA/M
Self-developmental orientation competitive attitude		
Competitive situations allow me to bring the best out of myself.	3.68	A/H
I enjoy testing myself in competitive situations	3.70	A/H
I enjoy competition as it allows me to discover my ability	3.63	A/H
Composite Mean	3.67	A/H
Lack of interest in competition		
I rarely feel motivated to compete with somebody	3.26	SWA/M
There is always something I'd rather do than take part in a competitive situation.	3.31	SWA/M
I don't care about competition	3.32	SWA/M
Composite Mean	3.30	SWA/M

Anxiety-driven competition avoidant		
I feel distressed in a competitive environment, so I avoid them whenever I can.	3.14	SWA/M
I feel pressured in a competitive situation	3.21	SWA/M
Even the smallest competition makes me feel anxious	3.13	SWA/M
Composite Mean	3.16	SWA/M
Overall Mean	3.32	SWA/M

Source: Erosz, et al. (2018).

Legend:

Statistical Range	Descriptive Interpretation (DI)
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 SA/VL)

Based on the data presented in the table, the employees’ overall competitive attitude received a mean rating of 3.32, which falls under the "somewhat agree/moderate" category. This indicates that employees possess a moderate level of competitiveness—not particularly high or low. When examining the individual dimensions of competitive attitude, only one—self-developmental orientation—was rated high, with a mean of 3.67. In contrast, hyper-competitive attitude (3.13), lack of interest in competition (3.30), and anxiety-driven competition avoidance (3.16) were all rated as moderate.

These results suggest that employees moderately agree that they have some interest in competition and may experience certain levels of anxiety related to it. They also indicate a balanced enjoyment of competition as a means of self-discovery, skill development, and goal achievement—while simultaneously rejecting harmful or destructive forms of competitiveness.

Experts emphasize that a moderate level of competitive attitude, maintained within a healthy and constructive range, can serve as a strong motivator for personal growth and achievement. Striving for excellence and outperforming others can be beneficial when kept in check; however, excessive competitiveness may negatively impact well-being and damage workplace relationships (Ma & Chen, 2024; Johansson, 2020; Klein & Newby, 2017; Grasseni & Origo, 2018; Houston et al., 2023).

Problem 2: What is the work performance of the employees in terms of:

- a. *Task performance*
- b. *Contextual performance*
- c. *Counterproductive work behavior*

Table 2: Work performance.

Indicator	Mean	DI
Task performance		
I managed to plan my work so that it was done on time	3.91	A/H
My planning was optimal	3.69	A/H
I kept in mind the results that I had to achieve in my work	3.92	A/H
I was able to separate main issues from side issues at work	3.75	A/H
I knew how to set the right priorities	3.93	A/H

I was able to perform my work well with minimal time and effort	3.66	A/H
Composite Mean	3.81	A/H
Contextual performance		
took on extra responsibilities	3.71	A/H
I started a new task myself when my old ones were finished	3.73	A/H
I took on a challenging work task, when available	3.66	A/H
I worked at keeping my job knowledge up-to-date	3.83	A/H
I worked at keeping my job skills up-to-date	3.83	A/H
I came up with creative solutions to new problems	3.86	A/H
I kept looking for new challenges in my job	3.78	A/H
I did more than was expected of me	3.82	A/H
I actively participated in work meetings	3.72	A/H
I actively look for ways to improve my performance at work	3.84	A/H
I grasped opportunities when they presented themselves	3.67	A/H
I knew how to solve difficult situations and setbacks quickly	3.59	A/H
Composite Mean	3.75	A/H
Counterproductive work behavior		
I complained about unimportant matters at work	2.95	SWA/M
I made problems greater than they were at work	2.87	SWA/M
I focused on the negative aspects of a work situation, instead of on the positive aspects	2.72	SWA/M
I spoke with colleagues about the negative aspects of my work	2.78	SWA/M
I spoke with people from outside the organization about the negative aspects of my work	2.77	SWA/M
I did less than was expected of me	2.77	SWA/M
I managed to get off from a work task easily	2.98	SWA/M
I sometimes did nothing, when I should have been working	2.70	SWA/M
Composite Mean	2.82	SWA/M
Overall Mean	3.46	A/H

Source: *Koopmans, et al. (2014)*.

The data in the table reveals that individual employees' overall work performance received an average rating of 3.46, which is interpreted as "agree/high." This indicates that employees' performance is generally above average but not at an exceptionally high level. It falls into the higher end of the spectrum but does not reach a level that would be considered very high, low, or moderate.

When examined by dimensions, task performance and contextual performance both received high ratings, while counterproductive behavior was rated as moderate. The low level of counterproductive behavior aligns with previous findings by Abun et al. (2022). Regarding task performance, employees indicated that they plan their work and concentrate their efforts on achieving their objectives. For contextual performance, employees recognized that they not only focus on completing assigned tasks but also take on extra responsibilities beyond their core duties. This includes actively participating in meetings and enhancing their skills and knowledge, often at their own expense

However, employees also expressed some agreement with behaviors like complaining, exaggerating problems, and occasionally leaving work before the designated time. These tendencies were rated less positively in comparison to the task and contextual performance dimensions.

Previous research consistently supports the idea that high performance in both task and contextual areas contributes to greater organizational success and productivity. It enhances efficiency, fosters a positive work environment, and drives innovation (Curral, 2014; Cheng & Gu, 2022; Nikiforow & Wagener, 2020; Adekiya, 2023).

Problem 3: What is the level of innovative work behavior of employees in terms of:

- a. *Opportunity exploration*
- b. *Idea generation*
- c. *Championing*
- d. *Application of new ideas*

Table 3: Innovative work behavior

Indicator	Mean	DI
Opportunity exploration		
I pay attention to issues that are not part of my daily work	2.83	SWA/M
I wonder how things can be improved	3.34	SWA/M
Composite Mean	3.09	SWA/M
Idea generation		
I search out new working methods, techniques or instruments	3.77	A/H
I generate original solutions for problems	3.67	A/H
I find new approaches to executing tasks	3.72	A/H
Composite Mean	3.72	A/H
Championing		
I make important organizational members enthusiastic about innovative ideas	3.60	A/H
I attempt to convince people to support an innovative idea	3.60	A/H
Composite Mean	3.60	A/H
Application of new ideas		
I systematically introduce innovative ideas into work practices	3.66	A/H
I contribute to the implementation of new ideas	3.66	A/H
I put effort into the development of new things	3.76	A/H
Composite Mean	3.69	A/H
Overall Mean	3.53	A/H

Source: *de Jong and Den Hartog (2008)*

The data in the table indicates that employees' overall innovative work behavior received an average rating of 3.53, which is interpreted as "agree/high." This suggests that employees' innovative work behavior is generally above average, though not exceptionally high. It is categorized as high, but not at the extreme end of the scale.

When examining the individual dimensions, all except for opportunity exploration (rated 3.09, which is moderate) fall within the high range. In terms of idea generation (3.72), employees reported that they often seek new ways of doing things. Similarly, for championing (3.60), employees agreed that they actively persuade others in the organization to support their innovative ideas and get them excited about these new concepts. The application of new ideas (3.69) also received a high rating, with employees acknowledging their efforts to introduce and develop innovative ideas in the workplace.

However, the opportunity exploration dimension was rated more moderately, indicating that employees did not feel their efforts to explore new ideas were as strong compared to other innovative behaviors.

Experts agree that highly innovative work behavior has significant benefits for organizations, including enhanced performance, increased competitiveness, and better adaptability to changing environments. Furthermore, it can lead to the development of innovative products and services, improved processes, and stronger management systems (Shah et al., 2020; Srirahayu et al., 2023; Sari et al., 2021; Sharifirad, 2013; Alessa & Durugbo, 2021).

Problem 4: Is there a relationship between competitive attitude and individual work performance?

Table 4: Correlation between competitive attitude and work performance

Competitive Attitude		Work Performance			
		Task performance	Contextual performance	Counterproductive work behavior	Overall work performance
Hypercompetitive attitude	Pearson Correlation	.373**	.391**	.658**	.660**
	Sig. (2-tailed)	.000	.000	.000	.000
Self-developmental orientation competitive attitude	Pearson Correlation	.798**	.820**	.172*	.751**
	Sig. (2-tailed)	.000	.000	.015	.000
Lack of interest in competition	Pearson Correlation	.579**	.495**	.614**	.765**
	Sig. (2-tailed)	.000	.000	.000	.000
Anxiety-driven competition avoidant	Pearson Correlation	.445**	.497**	.583**	.692**
	Sig. (2-tailed)	.000	.000	.000	.000
Overall competitive attitude	Pearson Correlation	.659**	.666**	.614**	.865**
	Sig. (2-tailed)	.000	.000	.000	.000

Source: SPSS, IBM

The findings indicate that competitive attitude has a significant and positive relationship with all dimensions of individual work performance—task performance, contextual performance, and counterproductive work behaviour. Most notably, self-developmental competitive attitude exhibited the strongest positive correlations with task performance ($r = .798$) and contextual performance ($r = .820$), while hypercompetitive attitude also correlated with work performance but showed a higher association with counterproductive behaviors ($r = .658$).

A significant relationship implies that as employees' competitive attitudes become stronger—whether driven by a desire to win (hypercompetitiveness) or by self-development (self-developmental competitiveness)—their work performance reliably improves. Employees motivated by personal growth are more likely to manage their tasks effectively, engage positively with colleagues, and exhibit proactive work behaviors beyond formal job descriptions.

This supports Orosz et al. (2018) and Menesini et al. (2018), who argue that positive forms of competitiveness, particularly those centred on self-development, enhance work-related outcomes by fostering resilience, optimism,

and a high achievement orientation. It also aligns with Bandura's (1986) Social Cognitive Theory, which posits that self-efficacy and positive attitudes significantly predict behavioral performance outcomes.

Problem 5: Is there a relationship between competitive attitude and innovative work behavior?

Table 5: Correlation between competitive attitude and innovative work behavior

Competitive Attitude		Innovative Work Behavior				Overall Innovative work behavior
		Opportunity Exploration	Idea Generation	Championing	Application of new ideas	
Hypercompetitive attitude	Pearson Correlation	.602**	.380**	.416**	.290**	.512**
	Sig. (2-tailed)	.000	.000	.000	.000	.000
Self-developmental orientation competitive attitude	Pearson Correlation	.374**	.764**	.679**	.759**	.771**
	Sig. (2-tailed)	.000	.000	.000	.000	.000
Lack of interest in competition	Pearson Correlation	.583**	.474**	.425**	.467**	.590**
	Sig. (2-tailed)	.000	.000	.000	.000	.000
Anxiety-driven competition avoidant	Pearson Correlation	.620**	.534**	.510**	.429**	.632**
	Sig. (2-tailed)	.000	.000	.000	.000	.000
Overall competitive attitude	Pearson Correlation	.660**	.651**	.616**	.585**	.757**
	Sig. (2-tailed)	.000	.000	.000	.000	.000

Source: SPSS, IBM

The results demonstrate that competitive attitude is significantly and positively related to all facets of innovative work behaviour—opportunity exploration, idea generation, championing, and application of new ideas. Self-developmental competitive attitude showed the strongest links, particularly with idea generation ($r = .764$) and application of new ideas ($r = .759$).

A significant relationship here means that employees who possess strong competitive attitudes, especially those aimed at personal growth, are more likely to engage in innovative behaviors, such as seeking new opportunities, generating original ideas, promoting change initiatives, and implementing new practices.

This finding supports de Jong and Den Hartog's (2008) conceptualization that innovation requires proactive, self-driven engagement with new ideas and practices. Moreover, it validates the propositions of Nguyen et al. (2021) and Shanker et al. (2017) that innovation at the individual level is deeply rooted in psychological and attitudinal foundations, such as entrepreneurial orientation and competitive drive.

Results and discussion

The study aimed to explore the impact of competitive attitude on work performance and innovative work behavior. The findings show that while competitive attitude received a moderate rating, both work performance and innovative work behavior were rated highly. Correlation analysis revealed that a competitive attitude positively influences both work performance and innovative work behavior. These results suggest further discussion on the theoretical and practical implications of the findings.

The study supports previous research suggesting that competitive attitudes act as a motivational factor for employees, driving them to perform better and foster innovation. With a competitive mindset, employees are more likely to strive for excellence, push their boundaries, and seek ways to outperform others—ultimately translating into higher performance and more innovative ideas (Eber et al., 2021; Wang et al., 2018; Franken & Brown, 1995). Additionally, the findings introduce the novel idea that a personality trait like competitiveness is linked to both performance and innovative behavior. This insight could inform strategies for personality-based selection and development.

A competitive attitude, often defined by a strong desire to win or outperform others, can be connected to certain personality traits, such as extraversion, agreeableness, conscientiousness, neuroticism, and openness. Specifically, extraversion and conscientiousness are particularly relevant to competitiveness (Houston et al., 2023; Klein & Newby, 2017; Klein & Newby, 2020; Burckle et al., 1999). Moreover, the findings emphasize the importance of organizational culture in fostering a competitive environment that encourages innovation, which, in turn, can lead to high performance (Mayer et al., 1995; Elsholz et al., 2021; Puiu, 2023).

From a practical standpoint, the study's findings suggest that management should integrate competitive elements into the performance management system, such as offering rewards and recognition for top performers. Institutions can also leverage a competitive attitude to drive innovation by encouraging employees to generate and implement new ideas, as well as providing incentives for successful innovations. In terms of training and development, organizations may focus on nurturing employees' competitive skills and fostering innovative behaviors. However, while competitiveness is important, management must strike a balance between promoting competitiveness and encouraging teamwork and collaboration.

Additionally, the findings imply that recruitment and selection strategies should consider candidates' competitiveness traits and skills that align with organizational goals for performance and innovation.

It is important to note that the results of this study are context-specific and may not be generalizable to all settings. Different environments or organizations may yield different results. As such, the practical application of these findings is most relevant to the context in which the study was conducted. To gain a deeper understanding, future studies should explore whether a competitive attitude consistently leads to improved performance and innovative behavior across diverse contexts.

Conclusion

This study sets to explore how a competitive attitude influences work performance and innovative behavior in the workplace. The results revealed an interesting pattern: while employees' competitive attitude was rated as moderate, both their work performance and innovative work behavior were rated highly. Using the Pearson r correlation coefficient, a significant connection was found between a competitive attitude and both individual performance and innovation. These findings suggest that organizations should consider fostering a work environment that encourages a competitive mindset, as it could lead to improved performance and the generation of more creative, forward-thinking ideas.

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References

- Abun, D. Foronda, S.L.G., Agoot, F., Luisita, M., & Magallanes, T. (2018). Measuring entrepreneurial attitude and entrepreneurial intention of ABM grade XII, Senior High School Students of Divine Word Colleges in Region I, Philippines. *International Journal of applied and fundamental research*. Publishing House of Academy of Natural Sciences. <https://doi.org/10.2139/ssrn.3807834>
- Abun, D., Nicolas, M. & Julian, F.P. (2021). Effect of attitude toward work, work environment, on the work of employees' self-efficacy. *International Journal of Research in Business and Social Science*, 10(7) <https://doi.org/10.20525/ijrbs.v10i7.1459>
- Abun, D., Julian, F.P. & Ballesteros, J.V. (2022). The Effect of work ethics of employees on their work performance. *Research in Management and Humanities (DWIJMH)*, 1(1), 58-82. Available at SSRN: <https://ssrn.com/abstract=4294581>
- Adekiya, A. (2023). Perceived job insecurity and task performance: what aspect of performance is related to which facet of job insecurity? *Current Psychology*, 43, 1340–1358 <https://doi.org/10.1007/s12144-023-04408-4>
- Ahmad, N. (2011). *Research-based insights inform change in IBM's M-learning strategy*. IGI Global Publisher of Timely Knowledge
- AlEssa, H.S., & Durugbo, C.M. (2021). A systematic review of innovative work behaviour concepts and contributions. *Management Review Quarterly*, 72, 1171–1208. <https://doi.org/10.1007/s11301-021-00224-x>
- Ajzen, I. (1993). *New directions in attitude measurement*. Walter de Gruyter.
- Ajzen, I., & Fishbein, M. (1977). Attitude-behavior relations: A theoretical analysis and review of empirical research. *Psychological Bulletin*, 84(5), 888–918. <https://doi.org/10.1037/0033-2909.84.5.888>
- Ajzen, I., & Fishbein, M. (2000). Attitudes and the attitude-behavior relation: Reasoned and automatic processes. *European Review of Social Psychology*, 11, 1-33. Wiley.
- Alahmed, M.I., Yusof, A., Saidon, A., Borhannudin, A., & Prihadi, K. (2017). The moderating role of attitude on the relationship between participation in competitive sports and academic performance of student-athletes in Saudi Arabia. In: Ibrahim, F., Cheong, J., Usman, J., Ahmad, M., Ramzan, R., Selvanayagam, V. (eds) *3rd International conference on movement, health and exercise*. Springer. https://doi.org/10.1007/978-981-10-3737-5_5

- Alessa, H.S. & Durugbo, C.M. (2021). A systematic review of innovative work behaviour concepts and contributions. *Management Review Quarterly*, 72(5), 1-38. <https://doi.org/10.1007/s11301-021-00224-x>
- Allport, G.W. (1935). Attitudes. In C. Murchison (Ed). *Handbook of social psychology*. Clark University Press.
- Allport, G.W. (1968). The Historical background of modern social psychology. In G. Lindzey and E. Aronson (Eds.). *Handbook of social psychology*. Addison-Wesley
- Amstrong, M. (2015). *Performance management: Key strategies and practical guidelines*. Kogan Page.
- Ariola, M.M. (2006). *Principles and methods of research*. National Bookstore
- Aronson, E. (1980). *The social animal*. Freeman
- Banaji, M.R. & Heiphetz, L. (2010). Attitudes. In S.T. Fiske, D.T. Gilbert & G. Lindzey (Eds). *Handbook of social psychology* (5th ed, Vol. 1, pp. 353-393). John Wiley & Sons
- Bandura A. (1977). *Social learning theory*. Prentice-Hall.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice-Hall.
- Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology*, 52, 1–26.
- Berger, N., Mackenzie, E. & Holmes, K. (2020). Positive attitudes towards mathematics and science are mutually beneficial for student achievement: a latent profile analysis of TIMSS 2015. *The Australian Educational Researcher*, 47, 409–444. <https://doi.org/10.1007/s13384-020-00379-8>
- Berry, C.M., Ones, D., & Sackett, P.R. (2007). Interpersonal deviance, organizational deviance, and their common correlates: A review and meta-analysis. *Journal of Applied Psychology*, 92, 410–24. <https://doi.org/10.1037/0021-9010.92.2.410>
- Bennett, R.J., & Robinson, S.L. (2000). Development of a measure of workplace deviance. *Journal of Applied Psychology*, 85, 349–60. <https://doi.org/10.1037/0021-9010.85.3.349>
- Borgida, E., & Campbell, B. (1982). Belief relevance and attitude–behaviour consistency: The moderating role of personal experience. *Journal of Personality and Social Psychology*, 42, 239–247. <https://doi.org/10.1037/0022-3514.42.2.239>
- Borman, W.C. & Motowidlo, S.J. (1993). *Expanding the criterion domain to include elements of contextual performance*. In: Schmitt N, Borman WC, eds. *Personnel selection in organizations*. Jossey Bass; 71–98. https://doi.org/10.1207/s15327043hup1002_3
- Borman W.C., & Motowidlo S.J. (1997). Task performance and contextual performance: the meaning for personnel selection research. *Human Performance*, 10, 99–109. https://doi.org/10.1207/s15327043hup1002_3
- Braun, S. & Hentschel, T. (2015). *Group process in an organization*. In *International encyclopedia of the social & behavioural sciences* (Second Edition). Elsevier

- Burckle, M.A., Ryckman, R.M., & Gold, J.A. (1999). Forms of competitive attitude and achievement orientation about disordered eating. *Sex Roles* 40, 853–870 (1999). <https://doi.org/10.1023/A:1018873005147>
- Campbell, J. P. (1990). Modelling the performance prediction problem in industrial and organizational psychology. In M. D. Dunnette & L. M. Hough (Eds.), *Handbook of Industrial and Organizational Psychology* (pp. 687–732). Consulting Psychologists Press, Inc.
- Campbell, J. P., McCloy, R. A., Oppler, S. H., & Sager, C. E. (1993). A theory of performance. In N. Schmitt & W. C. Borman (Eds.). *Personnel selection in organizations* (pp. 35-70). Jossey-Bass.
- Campbell, J.P., Hanson, M.A. & Oppler, S.H. (2001). *Modeling performance in a population of jobs*. Erlbaum
- Campbell, J.P. (2013b). Leadership, the old, the new, and the timeless: a commentary. *Oxford Handbook Online.*, 401–22. <https://doi.org/10.1093/oxfordhb/9780195398793.013.0024>
- Chaiken, S. (2001). *Attitude Formation: Function and Structure*. Elsevier.
- Chen, S.C. (2016). The role of competition in the service encounter: The loyal consumer perspective. In: Obal, M., Krey, N., Bushardt, C. (eds) *Let's get engaged! Crossing the threshold of marketing's engagement era*. Springer. https://doi.org/10.1007/978-3-319-11815-4_53
- Cheng, B. & Gu, J. (2022). The test is based on a meta-analysis of "Does workaholism prefer task performance or contextual performance?" *Frontier in Psychology*, 13,860687. <https://doi.org/10.3389/fpsyg.2022.860687>
- Cherry, K. (2019). What exactly is self-esteem? *Verywellmind*. Retrieved from <https://www.verywellmind.com/what-is-self-esteem-2795868>.
- Collier, S.A., Ryckman, R.M & Thornton, B. (2010). Competitive personality attitudes and forgiveness of others. *Journal of Psychology*, 144(6),535–543.
- Corey, S. M. (1937). Professed attitudes and actual behaviour. *Journal of Educational Psychology*, 28(4), 271-280. <http://dx.doi.org/10.1037/h0056871>
- Covin, J.G. & Wales, W.J. (2012) The measurement of entrepreneurial orientation. *Entrepreneurial Theory and Practice*, 36(4), 677–702
- Curral, L. (2014). Job core performance measures. In: Michalos, A.C. (eds) *Encyclopedia of quality of life and well-being research*. Springer. https://doi.org/10.1007/978-94-007-0753-5_582
- Dallas, R.S. (2005). A meta-analysis of the relationship between organizational citizenship behaviour and counterproductive work behaviour. *Journal of Applied Psychology*, 90,1241–55. <https://doi.org/10.1037/0021-9010.90.6.1241>
- Dean, L. (1958). Interaction reported and observed: The case of one local union. *Human Organization*, 17(3), 36-44, 1958.
- DeFleur, M.L. & Westie, F.R. (1958). Verbal Attitude and Overt Acts: An Experiment on the Salience of Attitude. *American Sociological Review* 23(6):667. <https://doi.org/10.2307/2089055>

- de Jong, J. & den Hartog, D. (2008). Measuring innovative work behaviour. *Creativity and Innovation Management*, 19(1). <https://doi.org/10.1111/j.1467-8691.2010.00547.x>
- De Spiegelaere, S., Van Gyes, G., & Van Hootehem, G. (2014). Innovatief Werkgedrag als concept: definiëring en oriëntering (The Innovative Work Behaviour concept: definition and orientation). *Gedrag & Organisatie*, 27(2), 139–156.
- Deszczyński, B. (2021). Research on the competitive advantage of the firm. In: *Firm competitive advantage through relationship management*. Palgrave Macmillan. https://doi.org/10.1007/978-3-030-67338-3_1
- Deutscher, I. (1968). Looking backwards: A case study on the progress of methodology in sociological research. *American Sociologist*, 4, 35-41. <https://www.jstor.org/stable/127701444>
- Diaz-Vilela, L.F. Rodriguez, N.D., Isla-Diaz, R., Diaz-Cabrera, D., Hernandez-Fernaund, E., & Rosales-Sacnchez, C. (2015). Relationships between contextual and task performance and interrater agreement: Are there any? *Plos One*, 10(10), <https://doi.org/10.1371/journal.pone.0139898>
- Doğru, C. (2019). The effects of perceived organizational support and leader-member exchange on contextual performance: A study in the banking sector. In *Handbook of Research on Contemporary approaches in management and organizational strategy*. IGI Global Publisher of Timely Knowledge
- 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>
- Eber, N., François, A. & Weill, L. (2021). Gender, age, and attitude toward competition. *Journal of Economic Behavior & Organization*, 192, 668–690. <https://doi.org/10.1016/j.jebo.2021.10.022>
- Elsholz, U., Fecher, B., Deacon, B., Schäfer, L. O., & Laufer, M. (2021). Implikationen der Covid-19-Pandemie für digitale Lehre: Organisierte Freiheit als Veränderungsparadigma. *MedienPädagogik: Zeitschrift für Theorie und Praxis der Medienbildung*, 40, 472–486. <https://doi.org/10.21240/mpaed/40/2021.11.29.X>
- Fazio, R.H. & Zanna, M.P. (1978a). Attitudinal qualities relating to the strength of the attitude-behaviour relationship. *Journal of Experimental Social Psychology*, 14, 398–408. [https://doi.org/10.1016/0022-1031\(78\)90035-5](https://doi.org/10.1016/0022-1031(78)90035-5)
- Fazio, R.H. & Zanna, M.P. (1978b). On the predictive validity of attitudes: The roles of direct experience and confidence. *Journal of Experimental Social Psychology*, 46, 228–243. <https://doi.org/10.1111/J.1467-6494.1978.TB00177.X>
- Fishbein, M., & Ajzen, I. (1974). Attitudes towards objects as predictors of single and multiple behavioural criteria. *Psychological Review*, 81(1), 59–74. <https://doi.org/10.1037/h0035872>
- Fitzsimmons, J.R., Douglas, E.J. (2005). *Entrepreneurial attitudes and entrepreneurial intentions: A cross-cultural Study of potential entrepreneurs in India, China, Thailand and Australia*. Babson-Kauffman Entrepreneurial Research Conference, Wellesley, MA. June 2005.

- Fox, S. & Spector, P.E. (2002). An emotion-centred model of voluntary work behaviour: Some parallels between counterproductive work behaviour and organizational citizenship behaviour. *Human Resource Management Review*, 12(2), 269–292. [https://doi.org/10.1016/S1053-4822\(02\)00049-9](https://doi.org/10.1016/S1053-4822(02)00049-9)
- Franken, R.E. & Brown, D.J. (1995). Why do people like competition? The motivation for winning, putting forth the effort, improving one's performance, performing well, being instrumental, and expressing forceful/aggressive behaviour. *Personality and Individual Differences*, 19(2), 175-184. [https://doi.org/10.1016/0191-8869\(95\)00035-5](https://doi.org/10.1016/0191-8869(95)00035-5).
- Freeman, L. C., & Ataoev, T. (1960). The invalidity of indirect and direct measures of attitude toward cheating. *Journal of Personality*, 28, 443-447. <https://doi.org/10.1111/J.1467-6494.1960.TB01631.X>
- Grasseni, M. & Origo, F. (2018). Competing for happiness: Attitudes to competition, positional concerns and well-being. *Journal of Happiness Studies*, 19(1). <https://doi.org/10.1007/s10902-017-9906-6>
- Griffin, M., Neal, A. & Neale, M. (2001). The contribution of task performance and contextual performance to effectiveness: Investigating the role of situational constraints. *Applied Psychology*, 49(3), 517-533. <https://doi.org/10.1111/1464-0597.00029>
- Gruys, M.L., & Sackett, P.R. (2003). Investigating the dimensionality of counterproductive work behaviour. *International Journal of Selection and Assessment*, 11,30–42. <https://doi.org/10.1111/1468-2389.00224>
- Gulino, D. (2022). *Assistive technologies and design for people with autism spectrum disorders: A selective overview*. IGI Global Publisher of Timely Knowledge. <https://doi.org/10.4018/978-1-7998-7430-0.ch003>
- Harrison, D. A., Newman, D. A., & Roth, P. L. (2006). How important are job attitudes? Meta-analytic comparisons of integrative behavioural outcomes and time sequences. *Academy of Management Journal*, 49(2), 305-325. <https://doi.org/10.5465/AMJ.2006.20786077>
- Homburg, C., Schäfer, H., Schneider, J. (2012). Competitor information: Know your opponent. In: *Sales excellence*. Springer. https://doi.org/10.1007/978-3-642-29169-2_13
- Horney, K. (1937). *The neurotic personality of our time*. Norton
- Houston, J. M., McIntire, S. A., Kinnie, J., & Terry, C. (2002). A factorial analysis of scales measuring competitiveness. *Educational and Psychological Measurement*, 62, 284–298. doi:10.1177/0013164402062002006.
- Houston, J.M., & Queen, J.S. (2020). Competition. 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_1615
- Houston, J.M., Harris, P.B., & Patrick, S. (2023). Revised competitiveness index (CI-R). In: Krägeloh, C.U., Alyami, M., Medvedev, O.N. (eds) *International handbook of behavioural health assessment*. Springer. https://doi.org/10.1007/978-3-030-89738-3_30-1.
- Ispas, D. & Borman, W.C. (2015). *Counterproductive work behavior*. Elsevier
- Janssen, O. (2000). Job demands, perceptions of effort-reward fairness and innovative work behaviour. *Journal of Occupational and Organizational Psychology*, 73(3), 287–302. <https://doi.org/10.1348/096317900167038>

- Johansson, T. Do Evaluative Pressures and Group Identification Cultivate Competitive Orientations and Cynical Attitudes Among Academics? *Journal of Business Ethics*, 176, 761–780. <https://doi.org/10.1007/s10551-020-04670-7>
- Kammeyer-Mueller, J.D., Alex L. Rubenstein, A.L. & Barnes, T.S. (2023). The role attitude in work behaviour. *Annual Reviews*, 11, 221-250. <https://doi.org/10.1146/annurev-orgpsych-101022-101333>
- Karapinar, P.B. (2017). *Well-being at work: A comprehensive review about Its predictors and outcomes*. IGI Global Publisher of Timely Knowledge.
- Kasemsap, K. (2016). *A unified framework of organizational perspectives and knowledge management and their impact on job performance*. IGI Global Publisher of Timely Knowledge
- Klein, R., & Newby, J. (2017). Competitiveness. In: Zeigler-Hill, V., Shackelford, T. (eds) *Encyclopedia of personality and individual differences*. Springer. https://doi.org/10.1007/978-3-319-28099-8_1056-1
- Klein, R., & Newby, J. (2020). Competitiveness. 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_1056
- Kohn, A. (1986). *No contest: The case against competition*. Houghton Mifflin
- Koopmans, L., Bernaards, C., Hildebrandt, V.H., de Vet, H. C., & van der Beek, A. J. (2011). Conceptual framework of individual work performance. *Journal of Occupational and Environmental Medicine*, 53(8), 856-66. <https://doi.org/10.1097/JOM.0b013e318226a763>
- Koopmans, L., Bernaards, C. M., Hildebrandt, V. H., de Vet, H. C., & van der Beek, A. J. (2014). Measuring individual work performance: identifying and selecting indicators. *Work (Reading, Mass.)*, 48(2), 229–238. <https://doi.org/10.3233/WOR-131659>
- Koopmans, L., Coffeng, J.K., & Bernaards, C.M. (2014). Responsiveness of the individual work performance questionnaire. *BMC Public Health* 14, 513 (2014). <https://doi.org/10.1186/1471-2458-14-513>
- Kraus, S.J. (1995). Attitudes and the prediction of behaviour: A meta-analysis of the empirical literature. *Personality and Social Psychology Bulletin*, 21,58–75.
- Lakie, W. L. (1964). Expressed attitudes of various groups of athletes toward athletic competition. *Research Quarterly*, 35, 497-503.
- Leedy, P.D. (1974). *Practical research: planning and design*. Macmillan
- Leong, C.T. & Rasli, A. (2017). The Relationship between innovative work behaviour on 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>
- Li, J. (2022). Personal competition among sports players and their performance as a team: A moderated mediation model. *Frontiers in Psychology*, 13, 862599. <https://doi.org/10.3389/fpsyg.2022.862599>

- Ma, C. & Chen, B.C. (2024) Influence of competitive attitude and self-efficacy on task motivation in vocational high school students: the moderating role of the competitive environment in the context of 'Lying Flat' culture. *Frontier in Psychology*, 15, 1427041. <https://doi.org/10.3389/fpsyg.2024.1427041>
- Martin, H. J., & Larsen, K. S. (1976). Measurement of competitive-cooperative attitudes. *Psychological Reports*, 39(1), 303–306. <https://doi.org/10.2466/pr0.1976.39.1.303>
- Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust. *Academy of Management Review*, 20(3), 709–734.
- McCombes, S. (2020). Descriptive research. *Scibbr*. Retrieved from <https://www.scribbr.com/methodology/descriptive-research/>
- Menesini, E., Tassi, F., and Nocentini, A. (2018). The competitive attitude scale (CAS): A multidimensional measure of competitiveness in adolescence. *Journal of Psychology Clinical Psychiatry*, 9, 240–244. <https://doi.org/10.15406/jpcpy.2018.09.00528>
- Motowidlo, S. J., Borman, W. C., & Schmit, M. J. (1997). A theory of individual differences in task and contextual performance. *Human Performance*, 10, 71–83.
- Motowidlo, S. J. (2003). Job performance. In W. C. Borman, D. R. Ilgen, & R. J. Klimoski (Eds.), *Handbook of psychology*. John Wiley & Sons, Inc.
- Murphy, K.R., Cleveland, J.N., & Hanscom, M.E. (2019). *Performance appraisal and management*. Sage Publication.
- 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 behaviour: 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>
- Nikiforow, N., & Wagener, S. (2020). The contextual effect of completion on the effectiveness of performance feedback. *Journal of Business Economics*, 91, 61–90. <https://doi.org/10.1007/s11573-020-00996-w>
- Núñez, M.E., Siddiqui, M.K. & Abbas, A. (2024). Motivation, attitude, knowledge, and engagement towards the development of sustainability competencies among students of higher education: a predictive study. *Discover Sustainability*, 5, 335. <https://doi.org/10.1007/s43621-024-00556-0>
- Organ, D.W. (1988). Organizational citizenship behaviour: It's constructed clean-up time. *Human Performance*, 10(2), 85-97.
- Orosz, G., Toth-Kiraly, I., Buki, N., Ivaskevics, K., Bothe, B. & Fulop, M. (2018). The four faces of competition: The development of multidimensional competitive orientation inventory. *Frontiers in Psychology*, 9, 7779
- Payne, A.A. (2010). Competition and student performance. In *International encyclopedia of education*. Elsevier
- Puiu, S. (2023). Organizational culture. In: Idowu, S.O., Schmidpeter, R., Capaldi, N., Zu, L., Del Baldo, M., Abreu, R. (eds) *Encyclopedia of sustainable management*. Springer. https://doi.org/10.1007/978-3-031-25984-5_567

- Purwanto, A. (2020), The impacts of leadership and culture on work performance in service company and innovative work behaviour as mediating effects. *Journal of Research in Business, Economics, and Education*, 2(1).
- Rajagopal (2012). Competitive advantage: Analysis and strategy. In: *Darwinian fitness in the global marketplace*. Palgrave Macmillan. https://doi.org/10.1057/9781137268334_3
- Raziq, A. & Maulabakhsh R. (2015). Impact of working environment on job satisfaction. *Procedia Economics and Finance*, 23. [https://doi.org/10.1016/S2212-5671\(15\)00524-9](https://doi.org/10.1016/S2212-5671(15)00524-9)
- Richard, J.F., Fonzi, A., & Tani, F., (2002). Cooperation and competition. In: Smith PK, editor. *Blackwell handbook of child social development*. Blackwell.
- Robinson, S.L. & Bennett, R.J. (1995). A typology of deviant workplace behaviours: A multidimensional scaling study. *The Academy of Management Journal*, 38(2):555-572. <https://doi.org/10.2307/256693>
- Rosenberg, M.J. & Hovland, C.I. (1960). Cognitive, affective and behavioural components of attitudes. In Hovland, C.I. & Rosenberg, M.J. (Eds). *Attitude organization and change*. Yale University Press.
- Ryckman, R.M., Hammer, M., Kaczor, L.M. & Gold, J.A. (1990). Construction of hypercompetitive scale attitude scale. *Journal of Personality Assessment*, 55(3&4)630-639.
- Ryckman, R. M., Hammer, M., Kaczor, L. M., and Gold, J. A. (1996). Construction of a personal development competitive attitude scale. *Journal of Personal Assessment*, 66, 374–385. https://doi.org/10.1207/s15327752jpa6602_15
- Ryckman, R. M., Thornton, B., and Gold, J. A. (2009). Assessing competition avoidance as a basic personality dimension. *Journal of Psychology*, 143, 175–192. <https://doi.org/10.3200/JRLP.143.2.175-192>
- Ryska, T.A. (2002). Perceived purposes of sport among recreational participants: the role of competitive dispositions. *Journal of Sport Behavior*, 25,91–112
- Sari, D.K., Yudianto, A. & Sinambela, F.C. (2021). *Work engagement and innovative work behaviour: Meta-Analysis Study*. Atlantis Press.
- Schneider B, H. (2016). *Childhood Friendships and Peer Relations: Friends and Enemies*. Routledge
- Schwartz, S.H. (1978). Temporal instability as a moderator of the attitude-behaviour relationship. *Journal of Personality and Social Psychology*, 36, 715–724. <https://doi.org/10.1037/0022-3514.36.7.715>
- Scott, S. G., & Bruce, R. A. (1994). Determinants of innovative behaviour: 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 behaviour. *Engineering Management, IEEE Transactions*, 45(1), 3– 10. <https://doi.org/10.1109/17.658656>
- Shah, S.T.H., Shah, S.M.A. & El-Gohary, H. (2022). Nurturing innovative work behaviour through workplace learning among knowledge workers of small and medium businesses. *Journal of the Knowledge Economy*, 14, 3616–3639. <https://doi.org/10.1007/s13132-022-01019-5>

- 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 behaviour. *Journal of Vocational Behavior*, 2(4). <https://doi.org/10.1016/j.jvb.2017.02.004>
- Sharifirad, M.S. Transformational leadership, innovative work behaviour, and employee well-being. *Global Business Perspectives*, 1, 198–225. <https://doi.org/10.1007/s40196-013-0019-2>
- Shavitt, S., & Fazio, R. H. (1991). Effects of attribute salience on the consistency between attitudes and behaviour predictions. *Personality and Social Psychology Bulletin*, 17(5), 507-516. <https://doi.org/10.1177/0146167291175005>
- Silong, A.D., Daryoush, Y., Omar, Z., & Othman, J. (2013). Improving job performance: Workplace learning is the first step. *International Journal of Education & Literacy Studies*, 1(1). <http://dx.doi.org/10.7575/aiac.ijels.v.1n.1p.100>
- Spector, P. E., Fox, S., Penney, L. M., Bruursema, K., Goh, A., & Kessler, S. (2006). The dimensionality of counterproductivity: Are all counterproductive behaviours created equal? *Journal of Vocational Behavior*, 68(3), 446-460. <https://doi.org/10.1016/j.jvb.2005.10.005>
- 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 behaviour in public organizations: A systematic literature review. *Heliyon*, 9(2), e13557. <https://doi.org/10.1016/j.heliyon.2023.e13557>.
- Thomas, W.I., & Znaniecki, F. (1918). *The Polish Peasant in Europe and America* (vol. 1). Badger.
- Turanligil, F.G. (2019). *Work-life balance in the tourism industry*. IGI Global Publisher of Timely Knowledge. <https://doi.org/10.4018/978-1-5225-5760-9.ch010>
- Upmeyer, A. (1989). *Attitudes and behavioural decisions*. Springer-Verlag.
- Vargas-Sánchez, A., Plaza-Mejía, M.Á., & Porrás-Bueno, N. (2016). Attitude. In: Jafari, J., Xiao, H. (eds) *Encyclopedia of tourism*. Springer. https://doi.org/10.1007/978-3-319-01384-8_11.
- Viswesvaran, C. (2002). Assessment of individual job performance: a review of the past century and a look ahead. In: Anderson N, Ones DS, Sinangil HK, Viswesvaran C, eds. *Handbook of Industrial, Work and Organizational Psychology. Vol 1: Personnel Psychology*. Sage Publications Ltd; 110–126
- Wang, H., Wang, L. & Liu, C. (2018) Employee Competitive Attitude and Competitive Behavior Promote Job-Crafting and Performance: A Two-Component Dynamic Model. *Frontier in. Psychology*, 9, 2223. <https://doi.org/10.3389/fpsyg.2018.02223>
- Wang, G., Mansor, Z.D. & Leong, Y.C. (2024). Unlocking digital performance: exploring the mediating role of employee competitive attitudes, behaviours, and dynamic capabilities in Chinese SMEs under high-involvement human resource management practice. *Journal of Innovation and Entrepreneurship*, 13, 37. <https://doi.org/10.1186/s13731-024-00395-3>

Watson, J.B. (1925). *Behaviourism*. Norton

West, M. A., & Farr, J. L. (1990). *Innovation and creativity at work*. John Wiley.

Wicker, A.W. (1969). Attitudes versus Actions: The relationship of verbal and overt behavioural responses to attitude objects. *Journal of Social Issues*, 25, 41-78. <https://doi.org/10.1111/j.1540-4560.1969.tb00619.x>

Wicker, A. W., & Pomazal, R. J. (1971). The relationship between attitudes and behaviour as a function of specificity of attitude object and presence of a significant person during assessment conditions. *Representative Research in Social Psychology*, 2(2), 26-31.

Wilkinson, D. (2000). *The researcher's toolkit: The complete guide to practitioner research*. Routledge

Wongvorachan, T. (2023). *The impact of classroom competition and cooperation on student academic performance*. <https://doi.org/10.31234/osf.io/7vugd>

Yang, W. & Meyer, K.E. (2019) Alliance proactiveness and firm performance in an emerging economy. *Indian Marketing Management*, 82, 26–237.

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