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HUMAN RESOURCE MANAGEMENT

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MASTER THESIS

DARBUOTOJŲ SAVIVERTĖS, INOVATYVAUS ELGESIO IR ĮSITRAUKIMO Į DARBĄ BEI VIDINĖS MOTYVACIJOS SĄRYŠYS	**THE RELATIONSHIP BETWEEN EMPLOYEE SELF-ESTEEM, INNOVATIVE BEHAVIOR, WORK ENGAGEMENT AND INTRINSIC MOTIVATION**

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INTRODUCTION

Relevance of the topic. Today, organizations dig deeper into the importance of having an engaged, enabled, and innovative workforce due to the fast-paced, highly competitive nature of the environment. With the evolution of the world and the newly set challenges, those who can make the most of their human capital are likely to be able to achieve sustainable growth while being competitive (Bakker & Albrecht, 2018). Hence, what seems to be a strategic imperative for many organizations is an understanding of the factors that lead to employee engagement and innovative behavior. Self-esteem has emerged in the research as a very important construct. Defined as the overall subjective value of an individual upon his own worth or value (Rosenberg, 1965), self-esteem has considered a growing body of evidence that seeks to establish an important linkage with employee attitude, behavior, and performance outcomes (Pierce & Gardner, 2004). In general, employees high in self-esteem are, by nature, more equipped to set difficult goals, break through setbacks, and maintain a positive prediction (Baumeister et al., 2003), all of which are very important for engagement and innovation at the worksite.

Work engagement-involving vigor, dedication, and absorption in one's work (Schaufeli et al., 2002)-has continually shown a linkage to a variety of constructive outcomes such as job performance, organizational commitment, and turnover intentions (Bakker & Demerouti, 2017). Engaged employees most likely invest themselves fully into their work roles and go the extra mile-albeit using different paths-to add value to an organization's achievements. Similarly, intrinsic motivation—defined as engaging in activities for their inherent enjoyment and satisfaction rather than external rewards (Ryan & Deci, 2000)—plays a crucial role in fostering workplace innovation. When employees are intrinsically motivated, they demonstrate greater creativity, persistence through challenges, and willingness to take the calculated risks necessary for innovation (Amabile & Pratt, 2016). Thus, the driving study on the antecedents and consequences of both engagement and intrinsic motivation became another "hot topic" for both researchers and practitioners. Innovative behavior is another vital aspect leading to organizational success. Anderson et al. (2014) state that in today's dynamic and unpredictable business environment, organizations that build up such a culture can further adapt, grow, and exploit opportunities. Innovative behavior helps develop new products, services, and processes that allow the organization to stay ahead of the competition and maintain its position.

Whereas self-esteem, work engagement, intrinsic motivation, and innovative behavior have all formed the subject of considerable empirical research, it has become increasingly apparent that these constructs do not act in isolation. Rather, they are likely to interact in numerous and complex ways to affect employee experiences and outcomes (Agarwal et al., 2012). For instance, an individual may draw on self-esteem as a personal resource that increases work engagement and intrinsic motivation, thus providing the energy, drive, and perseverance to undertake innovative behaviors. Another possibility is that work engagement and intrinsic motivation mediate the relationship between self-esteem and innovative behavior, whereby individuals with high self-esteem are more inclined to experience engagement and internal drive that propels them toward generating and implementing novel ideas. However, even with the theoretical and practical significance underlying the knowledge of the interplay between self-esteem, work engagement, intrinsic motivation, and innovative behavior, empirical studies that examine these relationships remain sparse. Although there have been some studies examining the relationships between pairs of these constructs (i.e., self-esteem and work engagement, self-esteem and innovative behavior), no integrative investigations have considered all four variables simultaneously. Furthermore, the mechanisms explaining these relationships are still not well understood, indicating a need for further exploration.

Novelty of the topic. While studies have demonstrated each construct independently yields positive results but researchers have explored the connections between these three constructs to an insufficient extent. The research by Xanthopoulou et al. (2007) shows that self-esteem raises both employee engagement and boosts their resilience and confidence levels. Self-esteem reportedly enables employees to take proactive steps toward new ideas because it makes them more inclined to be initiative-taking (Rank et al., 2009). Researchers have discovered that engagement-driven positive feelings and motivational states create the conditions for greater innovation along with creativity (Amabile, Barsade, Mueller, & Staw, 2005). The research relationships require thorough empirical testing as a unified approach. Studies investigating the interplay of mechanisms between self-esteem and innovative behavior together with engagement will establish improved knowledge about how these elements advance individual along with organizational outcomes. Organizations can use this research to make decisions regarding employee transformation programs as well as innovative approaches and workforce engagement frameworks. The research seeks to understand these connections because it will support academic knowledge development while practicing the findings.

The problem of the Master thesis. What is the relationship between self-esteem, innovative behavior, work engagement and intrinsic motivation among employees in organizations?

The aim of the Master thesis. To investigate the impact of self-esteem on innovative behavior through the mediating role of work engagement and intrinsic motivation.

The objectives of the Master thesis.

1. Analyze scientific literature on self-esteem, innovative behavior, work engagement and intrinsic motivation.
2. Investigate the relationship between self-esteem, work engagement, innovative behavior and intrinsic motivation in previously conducted scientific research.
3. Create a conceptual model of self-esteem, work engagement, innovative work behavior and intrinsic motivation.
4. Based on the conceptual model, conduct empirical research, and provide the results.
5. Based on empirical research, provide the conclusions and recommendations.

To attain the objectives, an analysis of scientific literature and quantitative research methodologies, including structured surveys and statistical data analysis, were employed. The examination of scientific literature entails organizing, contrasting, and synthesizing many sources of literature. Statistical data analysis encompasses both descriptive and inferential statistics.

The structure of the master thesis. The thesis divides its content into three main sections followed by summary points and final recommendations. The starting portion analyses fundamental theoretical components of self-esteem and innovative behavior while exploring work engagement with their associated relationships. The thesis methodology section begins with establishing a conceptual research model then demonstrates purposes and goals followed by forming hypotheses before revealing information about anticipated sampling techniques and sample quantity and data collection approaches along with selected scales for empirical research assessment procedures and predicted research constraints. The final section includes both statistical data analysis combined with empirical research findings for discussion purposes. Researchers find the conclusions and suggestions together with the summary and appendices within the final portion of the Master's thesis.

1. THEORETICAL ASPECTS OF SELF-ESTEEM, INNOVATIVE BEHAVIOR, WORK ENGAGEMENT AND INTRINSIC MOTIVATION

1.1 Theoretical Aspects of Self-Esteem Concept

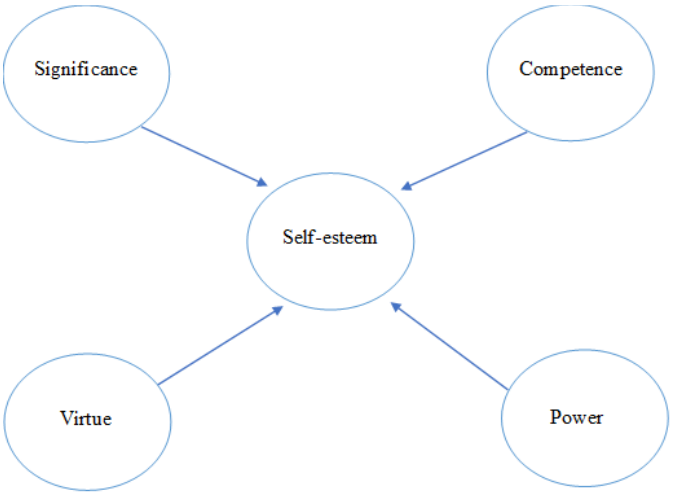
A person forms their self-esteem by subjectively evaluating their personal worth according to Isserow (2023). Self-esteem consists of a combination of personal beliefs with attitudes and the perception of how individuals view themselves including their potentials and their accomplishments together with their inherent characteristics. The fundamental nature of self-esteem leads professionals across psychology and sociology along with organizational behavior to conduct extensive inquiry into this concept.

Rosenberg (1965) defined self-esteem as "a positive or negative attitude toward a particular object, namely, the self" (p. 30) because this description highlights how people form their self-assessments by evaluating themselves through their environmental encounters. Multiple factors act on self-esteem development through personal achievements coupled with social connections as well as input from outside sources and community standards.

Coopersmith (1967) proposed a multidimensional model of self-esteem, identifying four key components:

Figure 1.

Components of Self-esteem



Source: (Coopersmith, 1967)

1. Significance: The feeling of being valued, accepted, and appreciated by others.

2. Competence: The belief in one's ability to perform tasks successfully and achieve desired outcomes.
3. Virtue: The adherence to moral and ethical standards, and the sense of being a good and worthy person.
4. Power: The ability to influence oneself and others, and the sense of control over one's life and environment.

These components suggest that self-esteem is a complex construct that can be derived from different sources, such as social approval, personal achievements, moral integrity, and a sense of agency and control.

Self-esteem theory evolved from different established psychological principles and theories. People use social comparison theory (Festinger, 1954) to evaluate themselves through comparison of their abilities with those of others along with their opinions and attributes. Those who have high self-esteem normally find other individuals to be comparable or inferior to them according to their domains of improvement. Self-perception for those with low self-esteem will often reveal themselves as inferior or inadequate when they compare themselves to others (Audina et al., 2024). People judge their self-esteem through social awareness because they need to uphold favorable self-views by comparing themselves positively to others.

According to Bem (1972) in self-perception theory people learn about their beliefs and attitudes and self-evaluation through observing their actions to identify their abilities and traits. People adopt knowledge about their identity by making meaning from their own actions in ways that mirror third-party evaluation processes. Self-esteem grows when someone demonstrates consistent success in a single domain because this performance evidence leads them to believe they possess abilities and competence for that area (Muhammad et al., 2024).

Understanding personal self-esteem requires an examination of the principles outlined in Attribution theory as proposed by Weiner (1985). According to this framework people examine their success and failure origins while these explanations direct their emotions along with motivating actions and long-term conduct. Those with high self-esteem interpret their life achievements through internal and stable elements that they can manage such as their abilities combined with their personal efforts (Muhammad et al., 2024). Self-sufficient people interpret their setbacks as short-term issues which they can surpass through dedicated effort and continued education. Individuals who have low self-esteem perceive success due to external or easily reproducible factors but they blame internal elements and permanent qualities and uncontrollable aspects for their failures.

Multiple research studies have demonstrated that self-esteem plays an important role throughout different areas of life such as academic achievement as well as career success and interpersonal connections and psychological wellness. According to the meta-analysis study conducted by Baumeister et al. (2003) people with high self-esteem demonstrated more happiness and satisfied with life and brighter moods along with superior resilience when facing stressful incidents and adverse situations. Also, Rotich (2016) demonstrated evidence that organizational-based self-esteem highly influence Work engagement. The authors identified that even though self-esteem provides advantages which tend to be limited in size so elevating self-esteem will not always result in enhanced life outcomes across every area.

Research shows that workplace self-esteem relations exist with performance levels and job satisfaction levels and organizational commitment degrees. According to Judge and Bono (2001) research self-esteem creates a direct relationship with both job performance and job satisfaction at $r = 0.26$ and $r = 0.45$ respectively. People with high self-esteem tend to establish tough vocational goals while persevering through obstacles while keeping optimistic approaches toward work which means they achieve superior career results.

According to Pierce and Gardner (2004) organization-based self-esteem (OBSE) represents a member's personal assessment of their organizational value together with their working competence and membership worth. Organization-based self-esteem grows through the collective workforce experiences along with direct employee interactions and feedback from inside the work environment including supervisor recognition and workplace support and chances to develop (Muhammad et al., 2024). Studies reveal that organization-based self-esteem (OBSE) creates positive effects on multiple beneficial results including job performance together with organizational citizenship behavior and employee well-being while simultaneously decreasing employee turnover intentions (Gardner & Pierce, 2015).

Research examines how self-esteem influences essential work-related concepts including leadership methods and teamwork performance and creative behavior in organizations. Studies indicate that leaders who have confident self-perceptions tend to use transformational leadership techniques showing charisma and motivation along with personal interest in their followers (Matzler et al., 2015). Positive self-views among individuals correlate with improved teamwork effectiveness and superior team performance through their active role in idea sharing and leadership abilities (Levi, 2017).

Research demonstrates that self-esteem serves as a primary element which helps increase workplace creativity together with innovation. Individuals with strong self-esteem are inclined to

carry out variable thinking processes and assume dangerous paths and introduce new suggestions because they feel confident enough to confront conventional methods (Muhammad et al., 2024). Employer support for employee self-esteem through practices that grant autonomy and enable participation and offer achievement recognition leads organizations toward fostering creative innovation environments.

1.2 Innovative Behavior Concept

West and Farr (1990) describe innovative behavior as the process of implementing new ideas along with products and processes or procedures in workplace environments. The method has gained significant recognition in current times because organizations require innovative workers to maintain their competitive advantage in evolving markets. Scott and Bruce (1994) defined innovative behavior as "the production or adoption of useful ideas and idea implementation" (p. 581). The authors described innovative behavior as a process that begins with recognizing problems and continues to idea creation followed by idea promotion before ending with the realization phase. The definition separates creativity into a concept-generation process from innovation by encompassing creative development and integrated concept implementation.

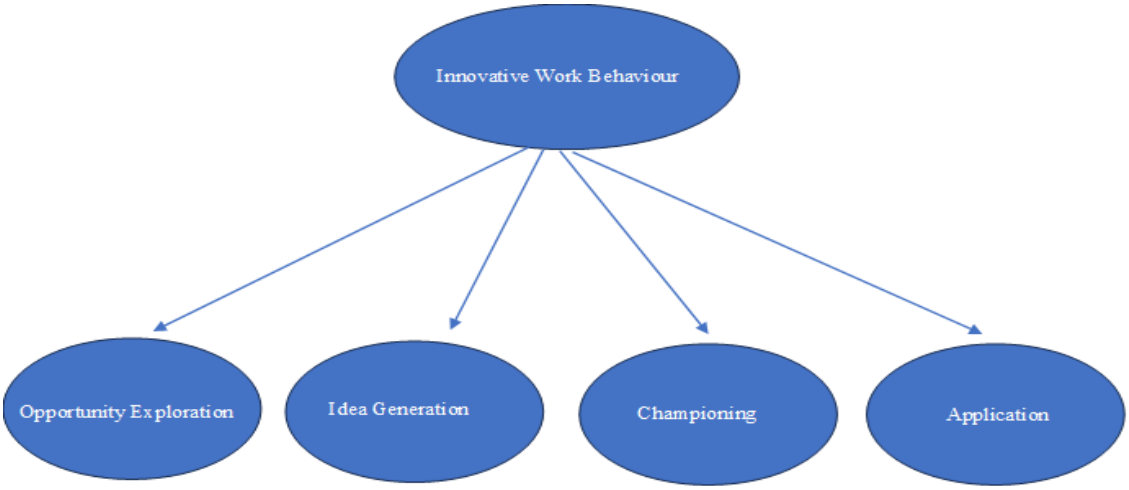
The research by Amabile (1988) demonstrates creative production generates singular beneficial solutions but West and Farr (1990) demonstrate innovation succeeds through actual implementation of fresh concepts. Ali et al. (2022) state creative thinking functions as an important innovative behavioral element because it enables people to generate novel ideas which evolve into applicable solutions. Any work environment must take additional steps beyond creative thinking for successful implementation of novel ideas which distinguishes innovation from creativity.

Janssen (2000) extended the definitions of innovative behavior through his three-dimensional model framework. The theoretical system explains innovative conduct through three progressive stages starting with idea creation and moving to idea advancement before realizing ideas. Idea generation produces novel useful concepts which evolve through idea promotion until they result in practical products or service solutions during the realization phase.

De Jong and Den Hartog (2010) provided a more detailed framework of Innovative Work Behavior, identifying four distinct dimensions:

Figure 2.

Framework of Innovative Work Behavior



Source: (De Jong and Den Hartog, 2010)

1. Opportunity exploration: Recognizing and understanding problems or opportunities that may require innovative solutions.
2. Idea generation: Creating novel and useful ideas to address identified problems or opportunities.
3. Championing: Promoting ideas to gain support and resources necessary for implementation.
4. Application: Implementing ideas into practical use within the work context.

This framework emphasizes the importance of both the cognitive aspects (e.g., problem recognition and idea generation) and the social aspects (e.g., idea promotion and implementation) of innovative behavior.

The cognitive dimension of innovative behavior includes mental procedures directing people toward developing original helpful concepts. Problem recognition appears critical to innovation since it involves understanding challenges and recognizing opportunities needing innovative solutions (De Jong & Den Hartog, 2010). Brain-based strategies for ideas emergence include brainstorming with analogical thinking and combinatorial thinking methods (Chen et al., 2020).

Social aspects of innovative behavior define how relationships evolve into essential procedures that support idea development among team members and extended personnel (Hui et al., 2020). Idea championing optimality requires managers to follow systematic stages that combine the demonstration of idea value to stakeholders and relationship building for securing necessary funding investments (according to De Jong and Den Hartog 2010). To champion ideas successfully an individual requires strong communication skills together with networking capabilities and

organizational navigation while also needing change management specific abilities and people influencing competencies (Janssen, 2005).

The final aspect of innovative conduct according to De Jong and Den Hartog (2010) involves transforming ideas into usable products and methods or solutions. The deployment of innovative concepts requires practical measures and structural implementation steps which need contextual adjustments to overcome implementation obstacles. During implementation organizations need to learn key lessons which enable them to modify necessary components to reach their optimal innovation results (Janssen, 2000).

The theoretical foundations of innovative behavior can be traced to several key theories in the fields of psychology and organizational behavior, including creativity theory and innovation diffusion theory. Amabile's (1988) componential theory of creativity serves as a foundation for understanding the individual factors that contribute to innovative behavior. This theory posits that creativity is influenced by three key components: domain-relevant skills (expertise and knowledge in a specific area), creativity-relevant processes (cognitive and personality traits that facilitate creative thinking), and intrinsic task motivation (the individual's genuine interest and engagement in the task).

Domain-relevant skills constitute knowledge and technical expertise along with experience which a person demonstrates within their particular field of work (Amabile, 1988). The applied skills provide complete groundwork to develop new practical concepts suitable for particular circumstances. A person with deep expertise in materials science and manufacturing processes demonstrates better new product design aptitude when compared to those who lack this domain-specific knowledge base (Saeed et al., 2019).

The cognitive and personality traits known as creativity-relevant processes allow people to develop creative thinking abilities (Amabile, 1988). People with creative potential develop flexibility in their thinking processes along with experience-based openness and adaptability to uncertain situations and opposition to rigid thinking structures. People who demonstrate these characteristics demonstrate higher probabilities of executing divergent thinking while examining multiple viewpoints for the creation of numerous suggestions.

Intrinsic task motivation refers to the individual's genuine interest and engagement in the task itself, rather than external rewards or pressures (Amabile, 1988). When individuals are intrinsically motivated, they are more likely to fully immerse themselves in the task, persist in the face of challenges, and take risks in pursuing novel ideas. Intrinsic motivation has been consistently linked to creativity and innovative behavior in various domains (Shalley et al., 2004).

Amabile (1988) established that the three interdependent elements decide how creative someone will be in their work. According to this theory for innovative behavior professionals who possess the required competencies alongside motivational behavior and cognitive performance abilities demonstrate increased innovative conducts.

According to Rogers (2003) innovation diffusion theory helps organizations understand how innovations spread across social systems through five adoption stages. The innovation-decision process includes five fundamental phases beginning with knowledge acquisition about the innovation followed by persuasion activities before leading to decision making about adoption which moves to implementation before reaching the confirmation stage.

According to innovation diffusion theory, Rogers (2003) demonstrates that communication channels together with social networks determine the spread of innovations. People with extensive social network contacts who access different information channels tend to encounter fresh ideas and innovative concepts (Arifin et al., 2021). Such individuals demonstrate increased power to convince their professional network to embrace new innovations by acting as influential advocates and transformative force within their organizational structures.

Innovative adoption depends on how individuals perceive attributes of new technology according to Rogers (2003). These attributes include relative advantage (the extent to which an innovation is perceived as better than the existing alternatives), compatibility (the degree to which an innovation is consistent with existing values, experiences, and needs), complexity (the perceived difficulty of understanding and using the innovation), trialability (the extent to which an innovation can be experimented with on a limited basis), and observability (the degree to which the results of an innovation are visible to others). A social system tends to adopt and diffuse new innovations when these enhancements have high relative advantage and compatibility alongside trialability and observability and minimal complexity (Miller & Miller, 2020).

In the context of innovative behavior, innovation diffusion theory highlights the importance of social influences and communication channels in the promotion and implementation of ideas. Employees who effectively communicate their ideas and persuade others to support and adopt them are more likely to see their innovative efforts come to fruition.

1.3 Work Engagement Concept

The concept of work engagement maintains increasing importance in organizational psychology and management research because it demonstrates consistent connection to beneficial

effects across both employees and organizational structures (Bakker & Albrecht, 2018). Employees demonstrate high-level organizational contributions through their energized dedication and profound absorption in their work according to Khusanova et al. (2021).

Work engagement emerges from positive psychology research which studies the elements that help individuals and communities succeed (Seligman & Csikszentmihalyi, 2014). Organizations now study engagement and well-being alongside organizational flourishing after positive psychology redirected their research efforts from stress and burnout to positive organizational phenomena (Bakker & Schaufeli, 2008).

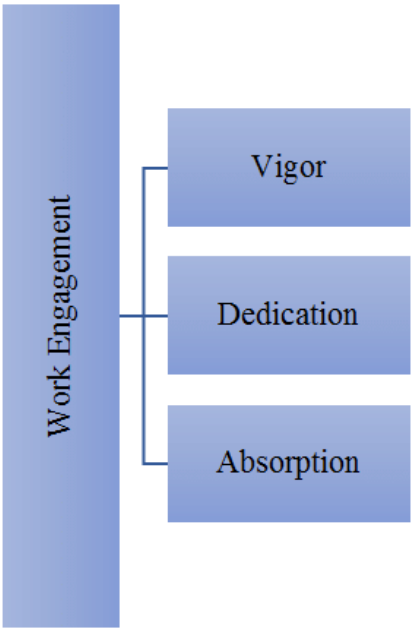
Work engagement is a positive, fulfilling, and work-related state of mind characterized by Vigor, dedication, and absorption (Inam et al., 2021). The concept of work engagement has gained significant attention in recent years due to its positive impact on employee well-being, job performance, and organizational success.

The origins of the work engagement concept can be traced back to Kahn's (1990) seminal work on personal engagement. Kahn defined personal engagement as "the harnessing of organization members' selves to their work roles; in engagement, people employ and express themselves physically, cognitively, and emotionally during role performances" (p. 694). This definition emphasizes the importance of employees bringing their complete selves to their work and investing their physical, cognitive, and emotional energies into their job performance.

Building upon Kahn's work, Schaufeli et al. (2002) developed a more specific conceptualization of work engagement, defining it as "a positive, fulfilling, work-related state of mind that is characterized by Vigor, dedication, and absorption" (p. 74). They proposed that work engagement consists of three distinct dimensions:

Figure 3

Three-dimensional conceptualization of work engagement



Source: (Schaufeli et al., 2002)

1. Vigor: Characterized by high levels of energy, mental resilience, willingness to invest effort in one's work, and persistence in the face of difficulties.
2. Dedication: Characterized by a strong involvement in one's work, a sense of significance, enthusiasm, inspiration, pride, and challenge.
3. Absorption: Characterized by being fully concentrated and deeply engrossed in one's work, whereby time passes quickly, and one has difficulty detaching oneself from work.

This three-dimensional conceptualization of work engagement has become widely accepted in the literature and has been supported by empirical research (Bakker & Demerouti, 2008; Christian, Garza, & Slaughter, 2011).

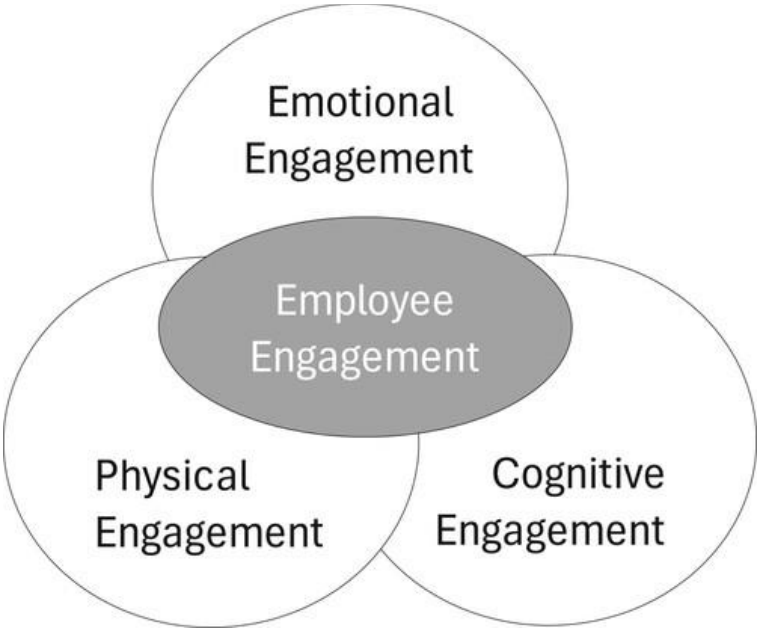
Vigor, the first dimension of work engagement, reflects the physical component of engagement, as it involves high levels of energy and mental resilience (Schaufeli et al., 2002). Vigorous employees are willing to invest substantial effort in their work and persist in the face of challenges and setbacks. They approach their work with a sense of purpose and vitality, which enables them to maintain high levels of performance even under demanding circumstances (Bakker & Demerouti, 2008).

Dedication, the second dimension of work engagement, reflects the emotional component of engagement, as it involves a strong identification with and involvement in one's work (Schaufeli et al., 2002). Dedicated employees experience a sense of significance, enthusiasm, inspiration, pride, and challenge in their work. They perceive their work as meaningful and purposeful, which fosters a deep sense of commitment and motivation (Bakker & Demerouti, 2008).

Absorption, the third dimension of work engagement, reflects the cognitive component of engagement, as it involves being fully focused and happily engrossed in one's work (Schaufeli et al., 2002). Absorbed employees are deeply immersed in their work, to the point where they may lose track of time and have difficulty detaching themselves from their tasks. This state of complete concentration enables them to fully leverage their skills and abilities, resulting in high-quality work performance (Bakker & Demerouti, 2008).

Figure 4.

Kahn's three dimensions of Employment Engagement



Source: (Kahn, 1990)

Kahn (1990) interrelated the three dimensions of engagement-physical, cognitive, and emotional-with three psychological conditions: (i) safety, which verifies whether the employees feel safe bringing his/her full self to work without risk of negative consequences; (ii) meaningfulness, which checks whether the employee finds his/her work meaningful enough (to the organization and to society) to engage his/her full self; and (iii) availability, which refers to having the right energy and resources to harness his/her full self.

The theoretical foundations of work engagement can be found in several well-established theories in the field of organizational psychology, including the Job Demands-Resources (JD-R) model and the Conservation of Resources (COR) theory. The Job Demands-Resources (JD-R) model (Bakker & Demerouti, 2007) proposes that work environments can be characterized by two broad categories of factors: job demands and job resources. Job demands refer to the physical,

psychological, social, or organizational aspects of the job that require sustained physical and/or psychological effort and are associated with certain physiological and/or psychological costs. Examples of job demands include high workload, time pressure, and emotional demands.

In contrast, job resources refer to the physical, psychological, social, or organizational aspects of the job that are functional in achieving work goals, reducing job demands and their associated costs, or stimulating personal growth, learning, and development. Examples of job resources include autonomy, performance feedback, and social support.

According to the JD-R model the combination of job demands and job resources matters most in analyzing employee well-being together with job performance outcomes. High levels of job resources act as protective elements that reduce the adverse impact of job demands on employee wellness and enhance workplace involvement. Job demands remain high when job resources are low so employees develop burnout together with disengagement.

The propositions of the JD-R model receive strong validation through empirical research concerning work engagement. Work engagement shows positive relations with job resources which include autonomy feedback and social support according to Wood et al.'s (2020) research. On the other hand, emotional demands and high workloads showed negative relations with work engagement. Organizations need to focus on creating optimal job resources while controlling job demands to foster work engagement among employees according to research findings.

According to the JD-R model job resources maintain their essential role in developing work engagement particularly during periods of high job demands (Bakker & Demerouti, 2007). Employees need job resources for adequate support and both motivation and energy to handle difficult job demands. Bakker et al., (2007) revealed that teacher job engagement predictions reached their peak when supervisors showed support and teachers received innovation and recognition during times when pupil misconduct was severe among teachers in Finland. Organizations should focus first on delivering essential job resources particularly for demanding work settings because this strategy helps preserve employee engagement while preserving their wellbeing.

The Conservation of Resources (COR) theory developed by Hobfoll in 1989 serves as a major theoretical basis for work engagement research. According to COR theory people make continual efforts to acquire and defend their valuable resources. As per COR theory humans invest in objects (e.g., tools, equipment), personal characteristics (e.g. self-efficacy, optimism), conditions (e.g. job security, social support) and energies (e.g. time, money) similarly.

According to COR theory, people face stress when their resources are threatened or actually lost or when they fail to gain matching resources after investing them. Work engagement levels

increase when employees invest their resources because they possess sufficient work-related assets consisting of supervisory support and collegial backing and control opportunities and feedback opportunities (Timm et al., 2015). Employees who encounter resource shortages or resource threat status may withdraw their engagement to safeguard what resources they still possess.

The concept of resource accumulation and resource caravans plays a crucial role in work engagement through the COR theory model Hobfoll (2011). Resource caravans represent how resources form united aggregates which individuals can access as support during emergency situations. When an employee works with a supportive supervisor, they gain multiple advantages including professional development opportunities along with feedback and recognition that improves their engagement and wellbeing (Nabawanuka & Nabawanuka, 2021). Organizations which develop resource caravans and establish favorable circumstances for employees to gain and utilize resources will enhance work engagement.

Empirical studies validate the propositions in COR theory regarding work engagement relationships. A study conducted by Xanthopoulou et al., (2009) demonstrated how personal resources including self-efficacy and optimism and self-esteem function as intermediaries linking job resources to work engagement in Dutch employees. Work engagement benefits from job resources that boost employee personal resources thus enabling them to fully dedicate themselves to their work roles (Khusanova et al., 2021).

Several research studies indicate which elements lead to work engagement formation and the resulting benefits that engaged personnel experience. Job resources have shown consistent relationships to work engagement according to the JD-R model. The elements of autonomy together with performance feedback and social support and learning opportunities were discovered to enhance work engagement (Bakker & Bal, 2010; Schaufeli & Bakker, 2004).

Work engagement begins from both job resources and personal resources that employees possess. Personal resources consist of psychological elements that demonstrate resilience by permitting people to govern and affect their surroundings successfully (Hobfoll et al., 2003). Three personal resources include self-efficacy, optimism and self-esteem. The findings demonstrate that staff members showing high personal resource capabilities display increased work engagement (Xanthopoulou et al., 2009).

A study published by Halbesleben (2010) established that both professional resources and individual resources create a positive relationship with work engagement using statistical findings ranging from small to medium magnitude. Companies can create work-engaged employees through administrative resources distribution along with individual resource development programs. Work

engagement results can be efficiently enhanced through personal resource-targeted interventions such as resilience training and coaching programs according to Luthans et al. (2006).

The leadership approach constitutes another essential factor which facilitates work engagement. Studies by Carasco-Saul et al. (2015) identified transformational leadership as the key factor in creating engaged employees because it helps inspire followers toward common organizational objectives. Through their leadership practice transformational managers help employees connect to their jobs by sharing meaningful visions and intellect challenges and personal recognition while maintaining purposeful tasks (Bakker & Demerouti, 2008).

Organizations along with their individuals benefit from numerous advantageous outcomes when employees demonstrate work engagement. Employed personnel who maintain engagement show better job satisfaction and organizational loyalty and reduced intention to leave their jobs according to research by Halbesleben (2010) and Saks (2006). Engaged employees show better health status along with enhanced well-being because they do not face burnout or stress-related illnesses according to Bakker, Schaufeli, Leiter, & Taris (2008).

Business organizations achieve improved work performance and higher customer satisfaction together with better financial outcomes through employee work engagement. Work engagement shows a positive relationship with both task performance and contextual performance according to the findings of Christian et al. (2011). Organizations achieving high employee engagement experience reduced absenteeism together with lower safety incidents and greater profitability (Harter, Schmidt, & Hayes, 2002).

Work engagement brings numerous positive outcomes thus demonstrating why organizations should develop and maintain their employees' participation because it drives business success (Inam et al., 2021). The State of the Global Workplace report by Gallup (2021) discovered that worldwide employee engagement levels reach only up to 20% which indicates many organizations need better engagement practices. Numerous studies have shown that low employee engagement leads to a global economic loss equivalent to $8.1 trillion in annually missed productivity according to the report.

Organizations should establish different engagement-driving strategies including job crafting and strengths-based development and employee recognition programs to overcome this challenge. The practice of job crafting enhances employee performance by enabling workers to change their work commitments and assets in ways that suit their abilities and interests (Bakker, Tims, & Derks, 2012). Employee recognition programs enable employers to give formal appreciation to workers' accomplishments which leads to better engagement because employees feel valued (Bakker & Demerouti, 2008).

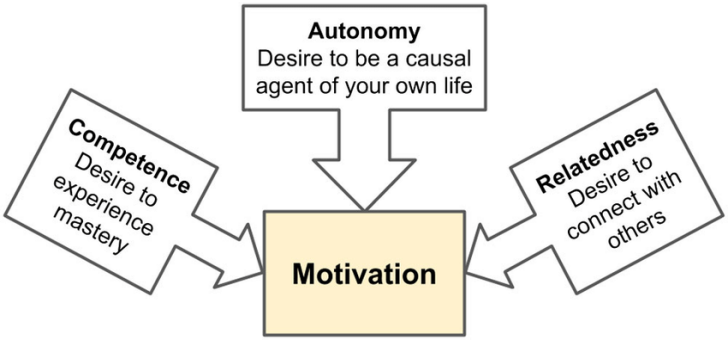
1.4 Intrinsic Motivation Concept

Intrinsic motivation represents a fundamental drive that energizes and directs human behavior through interest and enjoyment rather than external rewards or pressures. Ryan and Deci (2000) define intrinsic motivation as "the doing of an activity for its inherent satisfactions rather than for some separable consequence" (p. 56). When intrinsically motivated, individuals engage in activities for the pleasure, challenge, and satisfaction derived from the activity itself. This concept has gained significant attention in organizational research due to its profound impact on creativity, engagement, performance, and persistence in workplace settings.

The theoretical foundation of intrinsic motivation is primarily anchored in Self-Determination Theory (SDT) developed by Deci and Ryan (1985). According to SDT, intrinsic motivation flourishes when three basic psychological needs are satisfied: autonomy (experiencing choice and self-endorsement of actions), competence (feeling effective in one's interactions with the environment), and relatedness (feeling connected to others). When these needs are met in the workplace, employees are more likely to experience intrinsic motivation, which leads to enhanced well-being, creativity, and performance (Ryan & Deci, 2000).

Figure 5.

Self-Determination Theory's Three Basic Psychological Needs



Source: (Strubbe et al., 2020)

The concept of intrinsic motivation can be distinguished from extrinsic motivation, which refers to engaging in activities for instrumental reasons, such as obtaining rewards or avoiding punishment (Gagné & Deci, 2005). While extrinsic motivation may temporarily boost performance, research has consistently shown that intrinsic motivation leads to more sustained effort, deeper engagement, higher quality performance, and greater psychological well-being (Kuvaas et al., 2017). This distinction is particularly relevant in organizational contexts, where traditional management practices often rely heavily on extrinsic motivators such as bonuses, promotions, and recognition.

In the workplace context, intrinsic motivation manifests as an employee's genuine interest and enjoyment in their work tasks. Amabile et al. (1994) proposed the intrinsic motivation principle of creativity, which suggests that people are most creative when they are primarily intrinsically motivated by the interest, enjoyment, satisfaction, and challenge of the work itself. This principle has been supported by extensive research showing that intrinsic motivation is a key driver of creative and innovative performance (Amabile & Pratt, 2016).

Several factors in the work environment can enhance or undermine intrinsic motivation. Job characteristics such as skill variety, task identity, task significance, autonomy, and feedback have been identified as key determinants of intrinsic motivation (Hackman & Oldham, 1976). Additionally, leadership behaviors that support autonomy, provide meaningful rationales for tasks, offer optimal challenges, and give constructive feedback can foster intrinsic motivation among employees (Deci et al., 1989). Conversely, controlling management styles, excessive surveillance, and contingent rewards can undermine intrinsic motivation (Deci et al., 1999).

Empirical research has consistently demonstrated the positive relationship between intrinsic motivation and various work outcomes. For instance, a meta-analysis by Cerasoli et al. (2014) found that intrinsic motivation was a medium to strong predictor of performance quality across a wide range of settings and activities. In their study of 476 employees, Hon and Kim (2007) found that intrinsic motivation was positively related to employee creativity and that this relationship was strengthened when employees perceived a supportive work environment. Similarly, Grant (2008) found that intrinsic motivation was positively associated with persistence, performance, and productivity among fundraising callers.

In organizational practice, fostering intrinsic motivation requires creating work environments that satisfy employees' basic psychological needs. This includes providing meaningful work, autonomy in how tasks are accomplished, opportunities for skill development and mastery, constructive feedback, and supportive social connections. Organizations that prioritize intrinsic motivation often employ practices such as job crafting, which allows employees to reshape their work to better align with their interests and values (Berg et al., 2010).

1.5 Relationships between Self-Esteem, Innovative Behavior, Work Engagement and Intrinsic Motivation

Having examined the concepts and theoretical foundations of self-esteem, innovative behavior, and work engagement, it is essential to explore the potential relationships between these

constructs. This section aims to synthesize the existing literature and discuss the theoretical linkages and empirical evidence supporting the interplay between self-esteem, innovative behavior, and work engagement.

The relationship between self-esteem and innovative behavior has garnered significant attention from researchers in recent years. Self-esteem, which refers to an individual's overall subjective evaluation of their own worth or value (Wandy et al., 2021), is thought to play a crucial role in fostering individual innovation in the workplace. Theoretically, individuals with high self-esteem are more likely to possess the confidence, resilience, and motivation necessary to generate and implement novel ideas (Pierce & Gardner, 2004).

Several empirical studies have investigated the link between self-esteem and innovative behavior, providing evidence for the positive relationship between these two constructs. The table below summarizes some of the key research findings and their corresponding authors:

Table 1. *The relationship between self-esteem and innovative behavior*

Research findings	**Authors**
A study of 255 employees from various industries found that self-esteem was positively related to innovative behavior, and this relationship was mediated by creative self-efficacy.	Chen and Zhang (2019)
In a sample of 343 R&D engineers, self-esteem was found to be positively associated with innovative behavior, and this relationship was stronger when perceived organizational support was high.	Kim & Koo (2017)
A meta-analysis of 34 studies revealed a moderate positive correlation (r = 0.33) between self-esteem and creativity, a key component of innovative behavior.	Sitzmann & Yeo (2013)

Source: Gomes et al., (2015), Kim & Koo (2017), Sitzmann & Yeo (2013)

The studies in the table above provide empirical support for the positive relationship between self-esteem and innovative behavior across various contexts and industries. For example, Chen and Zhang (2019) found that individuals with higher self-esteem were more likely to engage in innovative behavior, and this relationship was explained by their increased creative self-efficacy. This suggests that self-esteem can foster a sense of confidence in one's creative abilities, which in turn promotes innovative behavior. Similarly, Kim and Koo (2017) demonstrated that the positive relationship between self-esteem and innovative behavior was stronger when employees perceived high levels of organizational support. This highlights the importance of creating a supportive work environment that nurtures employee self-esteem and encourages innovation. The meta-analysis by Sitzmann and Yeo (2013) provided further evidence for the robust link between self-esteem and creativity, which is a critical component of innovative behavior.

The relationship between self-esteem and work engagement has also received considerable attention in the literature. Self-esteem theory suggests that individuals with high self-esteem are more likely to experience positive emotions, set challenging goals, and persist in the face of obstacles (Baumeister et al., 2003). These characteristics are closely related to the concept of work engagement, which is characterized by Vigor, dedication, and absorption in one's work (Schaufeli et al., 2002).

Several studies have empirically investigated the link between self-esteem and work engagement, providing evidence for the positive association between these constructs. The table below summarizes some of the key research findings and their corresponding authors:

Table 2. *The relationship between self-esteem and work engagement*

Research findings	**Authors**
A study of 500 employees found that fostering employees' psychological meaningfulness can improve their self-efficacy, job involvement, proactive behavior, and, ultimately, their performance.	Kim (2023)
In a sample of 85 respondents, the results of the tests conducted show that work organizational commitment is able to mediate the relationship between self-esteem in the organization and employee performance, and organizational	Sembiring et al. (2023)

commitment is able to mediate the relationship between self-awareness and employee performance.	
A longitudinal study of 846 employees revealed that self-esteem at Time 1 predicted work engagement at Time 2, controlling for baseline levels of engagement.	Morin et al. (2015)

Source: Kim (2023), Sembiring et al. (2023), Morin et al. (2015)

The studies in the table above provide empirical support for the positive relationship between self-esteem and work engagement across various contexts and industries. For example, Kim (2023) found that employees with higher self-esteem were more likely to experience work engagement, and this relationship was explained by their increased sense of psychological meaningfulness and availability. This suggests that self-esteem can foster a deep sense of purpose and personal investment in one's work, which in turn promotes engagement. Similarly, Sembiring et al. (2018) demonstrated that self-esteem, along with other personal resources, was a significant predictor of self-awareness and employee performance. This highlights the importance of nurturing employee self-esteem as a means of promoting engagement and well-being in high-stress occupations. The longitudinal study by Morin et al. (2015) provided further evidence for the causal link between self-esteem and work engagement, suggesting that efforts to boost self-esteem can have lasting effects on employee engagement over time.

While the direct relationships between self-esteem, innovative behavior, and work engagement have been well-established, there is also evidence to suggest that these constructs may interact in complex ways. For example, some researchers have proposed that work engagement may mediate the relationship between self-esteem and innovative behavior (Park et al., 2014). The logic behind this idea is that employees with high self-esteem are more likely to experience work engagement, which in turn provides them with the energy, focus, and persistence necessary to generate and implement novel ideas. Other researchers have suggested that self-esteem may moderate the relationship between work engagement and innovative behavior (Agarwal et al., 2012), such that engaged employees are more likely to translate their passion and dedication into tangible innovations when they possess high levels of self-esteem.

The link between work engagement and innovative behavior has been well-established in the literature. Engaged employees, who are characterized by high levels of energy, dedication, and absorption in their work, are thought to be more likely to engage in innovative behaviors (Agarwal,

2014). The positive effect and motivation associated with work engagement can drive individuals to explore new ideas, take risks, and persist in the face of challenges when implementing innovations.

Several empirical studies have investigated the relationship between work engagement and innovative behavior, providing evidence for the positive association between these constructs. The table below summarizes some of the key research findings and their corresponding authors:

Table 3. *The relationship between work engagement and innovative behavior*

Research findings	**Authors**
Respondents to a survey were 979 Indian managerial employees working in six service sector organizations in India. Results suggest quality of exchanges between employees and their immediate supervisors' influences engagement. Work engagement correlates positively with innovative work behavior and negatively with intention to quit. Work engagement mediates the relationship between LMX and innovative work behavior, and partially mediates intention to quit.	Agarwal, Datta, Blake-Beard, and Bhargava (2012)
The paper reports a quantitative study of 323 managers working in manufacturing and pharmaceutical organizations based in western India. Results suggest that procedural justice, interactional justice and psychological contract fulfilment are positively related to work engagement with trust as the mediating element. Engagement significantly influences employees' innovative work behavior	Agarwal (2014)
The study hypothesizes that (a) transformational leadership relates to followers' work engagement both directly and indirectly through their psychological states,	Aryee, Walumbwa, Zhou, and Hartnell (2012)

(b) work engagement relates to innovative behavior, (c) innovative behavior relates to task performance, and (d) the work engagement–innovative behavior relationship is moderated by leader–member exchange. Results from a test of these relationships in a sample of employees of a large telecommunication company in China largely support our hypothesized model.	

Source: Agarwal, Datta, Blake-Beard, and Bhargava (2012), Agarwal (2014), Aryee, Walumbwa, Zhou, and Hartnell (2012)

The studies in the table above provide empirical support for the positive relationship between work engagement and innovative behavior across various contexts and industries. For example, Agarwal et al. (2012) and Agarwal (2014) found that work engagement significantly predicted innovative work behavior among employees in India, with trust, psychological capital, and justice perceptions acting as mediators and moderators, respectively. This suggests that engaged employees are more likely to trust their organizations, possess positive psychological resources, and perceive fairness in their work environments, which can foster innovative behavior.

Similarly, Aryee et al. (2012) demonstrated that work engagement was positively associated with innovative work behavior among employees in China telecommunication company. This study highlights the importance of knowledge sharing, transformational leadership, creative self-efficacy, and high-performance work systems in enhancing the relationship between work engagement and innovative behavior.

The relationship between self-esteem and intrinsic motivation has received considerable attention in organizational psychology research. According to Self-Determination Theory, individuals with higher self-esteem are more likely to experience feelings of competence and autonomy, which are fundamental psychological needs that foster intrinsic motivation (Ryan & Deci, 2000). When employees feel confident about their abilities and worth, they are more inclined to engage in activities for their inherent satisfaction rather than external rewards.

Several empirical studies have investigated the link between self-esteem and intrinsic motivation, providing evidence for the positive relationship between these constructs. The table below summarizes some of the key research findings and their corresponding authors:

Table 4. *The relationship between self-esteem and intrinsic motivation*

Research findings	Authors
A study of 950 secondary students, their findings indicated that a perceived need-supporting environment fostered greater need satisfaction, which, in turn, predicted intrinsic motivation and positive outcomes in physical education.	Standage et al. (2005)
In a longitudinal study of 251 employees and 183 university students. The study found that core self-evaluations, a broad personality concept, are linked to job satisfaction, with intrinsic job characteristics (both perceived and objective job complexity) playing a mediating role in this relationship.	Judge et al. (2005)
They investigated the motivational mechanisms of employee creativity across 191 independent samples, encompassing a large sample size of 51,659 participants. Their findings indicate that intrinsic motivation, creative self-efficacy, and prosocial motivation each uniquely predict creativity and function differently.	Liu et al. (2016)

Source: Standage et al. (2005), Judge et al. (2005), Liu et al. (2016)

The studies in the table above provide empirical support for the positive relationship between self-esteem and intrinsic motivation across various contexts. Standage et al. (2005) found that individuals with higher self-esteem experienced greater satisfaction of their basic psychological needs for autonomy, competence, and relatedness, which in turn enhanced their intrinsic motivation. This suggests that self-esteem creates the psychological foundation necessary for engaging in activities for their inherent enjoyment. Similarly, Judge et al. (2005) demonstrated the longitudinal effects of self-esteem on intrinsic motivation, indicating that the relationship has lasting effects over time. The study by Liu et al. (2016) further highlighted how organization-based self-esteem specifically influences workplace intrinsic motivation, which is particularly relevant for understanding innovative behavior in organizational settings.

The relationship between intrinsic motivation and innovative behavior has been well-established in the literature. Intrinsically motivated employees are more likely to engage in the exploration, generation, championing, and implementation of novel ideas because they find these activities inherently satisfying and challenging (Zhang & Bartol, 2010). According to Amabile's (1988) componential theory of creativity, intrinsic motivation is one of the three essential components for creative performance, alongside domain-relevant skills and creativity-relevant processes.

Several studies have empirically investigated the relationship between intrinsic motivation and innovative behavior, providing evidence for the positive association between these constructs. The table below summarizes some of the key research findings and their corresponding authors:

Table 5. *The relationship between intrinsic motivation and innovative behavior*

Research findings	Authors
Using a longitudinal design over six days with multi-source data from 76 students, the study found that daily intrinsic motivation was positively related to daily innovative behavior, and this relationship was mediated by proactive goal regulation.	Devloo et al. (2014)
The findings revealed that empowering leadership positively influenced psychological empowerment, which subsequently affected both intrinsic motivation and creative process engagement. These two variables, in turn, positively impacted employee creativity.	Zhang & Bartol (2010)
Based on a sample of 181 employee–supervisor dyads, the findings indicated that extrinsic rewards for creativity positively predict creative performance when employees possess high creative self-efficacy and value these rewards.	Malik et al. (2015)

Source: Devloo et al. (2014), Zhang & Bartol (2010), Malik et al. (2015)

The studies in the table above demonstrate the robust relationship between intrinsic motivation and innovative behavior across different organizational contexts. Devloo et al. (2014) provided particularly compelling evidence through their daily diary methodology, showing that fluctuations in intrinsic motivation correspond with changes in innovative behavior on a day-to-day basis. This temporal specificity strengthens the causal interpretation of the relationship. Zhang & Bartol (2010) highlighted the importance of creative process engagement as a mechanism through which intrinsic motivation influences innovation, suggesting that intrinsically motivated employees are more likely to deeply engage with creative processes. The study by Malik et al. (2015) further demonstrated how job autonomy enhances the relationship between intrinsic motivation and innovation, indicating that organizational factors can amplify the effects of individual motivation.

The mediating role of intrinsic motivation in the relationship between self-esteem and innovative behavior represents an important theoretical mechanism. When individuals possess high self-esteem, they develop greater confidence in their abilities and a stronger sense of personal worth, which makes them more likely to pursue activities for their inherent satisfaction rather than external validation (Ferris et al., 2015). This intrinsic orientation toward work activities creates the psychological conditions necessary for sustained creative effort and risk-taking behaviors essential for innovation. Research by Herbiyanti et al. (2024) demonstrated that self-esteem influences

innovative behavior indirectly through its effects on intrinsic motivation, supporting the mediating mechanism proposed in this study.

2. THE IMPACT OF SELF-ESTEEM ON INNOVATIVE BEHAVIOR THROUGH THE MEDIATING ROLE OF WORK ENGAGEMENT AND INTRINSIC MOTIVATION, RESEARCH METHODOLOGY

2.1 The aim and objectives of the research, conceptual framework, and hypotheses

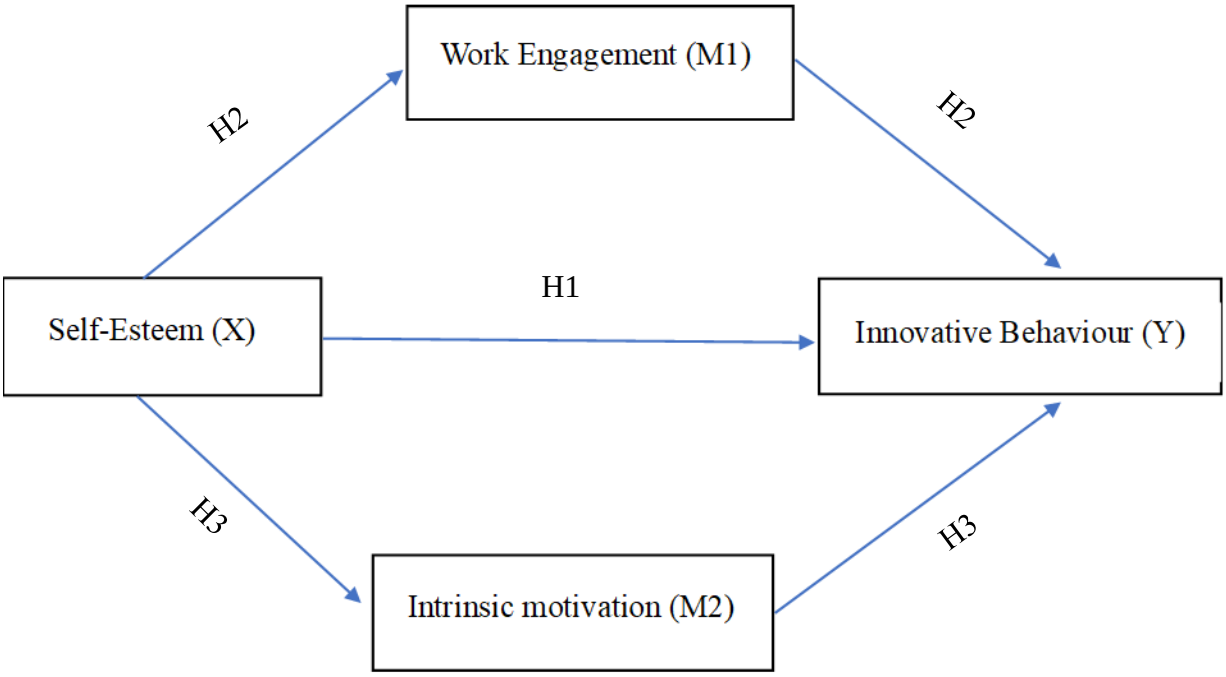
The aim of the research is to evaluate the impact of self-esteem on innovative work behavior through the mediating role of work engagement and intrinsic motivation. Research objectives:

1. Identify respondents' perceptions of self-esteem, work engagement, intrinsic motivation, and innovative behavior in organizations operating in Lithuania, using a structured questionnaire survey method.
2. Determine the reliability and internal consistency of the research questionnaire, using the Cronbach alpha coefficient.
3. Determine the normality of data distribution using Skewness/Kurtosis tests.

4. Identify the differences in evaluations of studied variables according to demographic and organizational characteristics of respondents using means and one-way ANOVA.
5. Identify whether self-esteem has a direct impact on innovative work behavior.
6. Identify whether work engagement has an indirect effect on the relationship between self-esteem and employee innovative behavior, using mediation analysis.
7. Identify whether intrinsic motivation has an indirect effect on the relationship between self-esteem and employee innovative behavior, using mediation analysis.

Variables of the research. To conduct empirical research one independent variable (X), mediator (M1), mediator (M2), and dependent variable (Y) were selected corresponding to the following constructs: X – Self-esteem; M1 – Work engagement; M2 – Intrinsic motivation; Y – Innovative behavior (See research model Fig 6).

Figure 6. Research model



Source: compiled by the author

Individuals with high self-esteem tend to have greater confidence in their abilities, are more willing to take risks, and show resilience in the face of setbacks (Baumeister et al., 2003). These characteristics are conducive to innovative behavior, as innovation often requires individuals to venture into uncharted territories and persist through challenges. Additionally, high self-esteem provides employees with the psychological security needed to propose unconventional ideas and challenge established practices. Research by Pierce and Gardner (2004) indicates that individuals with strong self-esteem demonstrate greater initiative and proactive behavior in workplace settings. Previous research suggests that self-esteem positively impacts the innovative behavior of employees (Chen & Zhang, 2019; Kim & Koo, 2017; Sitzmann & Yeo, 2013), therefore the following hypothesis is proposed:

H1: Self-esteem is positively associated with innovative behavior.

Self-esteem influences how individuals perceive and engage with their work environment. Those with high self-esteem are more likely to feel valued and capable, which contributes to a state of vigor, dedication, and absorption in their work activities (Xanthopoulou et al., 2009). Work engagement, characterized by these three dimensions, has been consistently linked to innovative behavior as engaged employees have the energy and motivation to explore new ideas and implement them (Husin et al., 2021). The mediating mechanism operates through enhanced psychological

availability and meaningfulness—employees with higher self-esteem experience greater psychological resources, enabling them to invest more fully in their work roles (Kahn, 1990). This deeper immersion in work facilitates the cognitive flexibility, persistence, and risk-taking necessary for innovation. Additionally, the emotional resilience associated with high self-esteem helps employees maintain engagement even when facing setbacks in the innovation process (Rotich, 2016). Previous research has shown that self-esteem enhances work engagement (Morin et al., 2015), which in turn fosters innovative behaviors (Agarwal, 2014). Therefore, based on previous research, the following hypothesis is proposed:

H2: Work engagement mediates the relationship between self-esteem and innovative behavior.

Individuals with high self-esteem are also more likely to engage in activities for their inherent satisfaction rather than for external rewards or recognition. This intrinsic motivation, characterized by interest, enjoyment, and satisfaction derived from the work itself, is a crucial factor in fostering innovative behavior (Amabile, 1988). According to Self-Determination Theory, self-esteem contributes to feelings of competence and autonomy, which are key psychological needs that facilitate intrinsic motivation (Ryan & Deci, 2020). Research has shown that self-esteem positively influences intrinsic motivation (Ferris et al., 2015), which in turn promotes innovative behaviors (Zhang & Bartol, 2010). Therefore, the following hypothesis is proposed:

H3: Intrinsic motivation mediates the relationship between self-esteem and innovative work behavior.

Individuals with high self-esteem often derive satisfaction from the inherent joy of tasks rather than external validation, fostering internal drive and task persistence. This intrinsic motivation, characterized by enjoyment in challenging activities and problem-solving, creates the psychological foundation for experimentation and creative risk-taking essential for innovation. Research by Ferris et al. (2018) demonstrated that self-esteem enhances intrinsic motivation, while Zhang & Bartol (2010) established that intrinsically motivated employees demonstrate superior innovative outcomes.

2.2 Sampling strategy, sample size, and data collection

Sampling Strategy. Non-probability purposive sampling approach was chosen to perform the empirical research. The research participants were employees working in various organizations operating in Lithuania, with a focus on sectors where innovation is considered strategic, including technology, finance, manufacturing, and services.

Sample size. The sample size needed for the research was calculated using the item-response ratio method, which recommends 5 respondents per questionnaire item.

Table 6. *The comparison of sample sizes*

Author	**Name of the article**	**Sample size**
Chen, Y., & Zhang, L. (2019)	Be creative as proactive? The impact of creative self-efficacy on employee creativity: A proactive perspective	331
Agarwal, U. A., Datta, S., Blake-Beard, S., & Bhargava, S. (2012)	Linking LMX, innovative work behavior and turnover intentions: The mediating role of work engagement	979
Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2009)	Work engagement and financial returns: A diary study on the role of job and personal resources	42
Kim, M.-S., & Koo, D.-W. (2017)	Linking LMX, engagement, innovative behavior, and job performance in hotel employees	290
Morin, A. J., Meyer, J. P., Bélanger, É., Boudrias, J.-S., Gagné, M., & Parker, P. D. (2015)	Longitudinal associations between employees' beliefs about the quality of the change management process, affective commitment to change and psychological empowerment	78
	All respondents **Average**	**1,720** **344**

Source: Compiled by the author

Given that our research instruments contain the following number of items:

- Rosenberg Self-Esteem Scale: 10 items
- Utrecht Work Engagement Scale (UWES-9): 9 items
- Intrinsic Motivation Subscale: 18 items
- Innovative Work Behavior scale: 14 items

The total number of items is 51. Applying the 1:5 ratio: 51 items × 5 respondents per item = 255 respondents

To ensure robust statistical analysis, especially for mediation testing, and to account for potential incomplete responses, we will aim for a minimum sample size of 260 respondents.

This sample size is also supported by previous similar studies as shown in Table 4, where the average sample size was 344 respondents, confirming that our target of 260 respondents is reasonable while remaining practical for the scope of this research.

Data collection. To collect the data for empirical research survey method was selected. A structured survey questionnaire was constructed consisting of 65 items and structured in five sections covering self-esteem, work engagement, innovative behavior, intrinsic motivation and demographic/organizational characteristics. The demographic/organizational section includes questions about the age of the respondents, gender, level of education, respondent tenure in the organization, the size of the company, and the sector it operates.

The emails with the external link for the online survey via www.docs.google.com website will be sent to the human resource departments, managers, and employees directly and through professional networks like LinkedIn. An introductory message addressing the respondent's valued contribution to the study, the purpose of the survey, and an indication of the time needed to fill out the questionnaire will be added to promote a greater response rate. Since the respondents will be asked to self-report on potentially sensitive topics like self-esteem, additional measures suggested by Ried et al., (2022) will be taken to prevent common method bias. A statement indicating that there are no right or wrong answers as well as assertions about the anonymity of the answers will be added to the preamble.

Working definitions. To avoid ambiguity the following working definitions are used in this study:

Self-esteem: The overall subjective evaluation of an individual's own worth or value (Rosenberg, 1965), including personal beliefs, attitudes, and perceptions of one's potential, accomplishments, and inherent characteristics.

Innovative behavior: Individual behaviors directed toward creating, introducing, and implementing novel ideas at any organizational level, encompassing opportunity exploration, idea generation, formative investigation, championing, and application (Kleysen & Street, 2001; De Jong & Den Hartog, 2010).

Work engagement: A positive, fulfilling, work-related state of mind characterized by vigor (high levels of energy and mental resilience), dedication (strong involvement and sense of

significance), and absorption (being fully concentrated and deeply engrossed in work) (Schaufeli et al., 2002).

Intrinsic motivation: Engagement in an activity for its inherent satisfaction rather than for separable consequences; driven by internal rewards such as interest, enjoyment, and a sense of accomplishment (Ryan & Deci, 2000).

2.3 Measurement scales

The measurement scales for the constructs of self-esteem, work engagement, intrinsic motivation and innovative work behavior were employed from previous research.

Self-esteem is measured with the 10-item Rosenberg Self-Esteem Scale (Rosenberg, 1965), which is the most widely used measure of global self-esteem. The scale measures overall feelings of self-worth and self-acceptance. The scoring is done on a 4-point Likert scale, where 1 – strongly disagree, 4 – strongly agree. Items 2, 5, 6, 8, and 9 are reverse-scored. The higher value indicates higher levels of self-esteem. The scale is shown in Table 5.

Table 7. *Rosenberg Self-Esteem Scale*

Item
1. On the whole, I am satisfied with myself.
2. At times I think I am no good at all. (R)
3. I feel that I have a number of good qualities.
4. I am able to do things as well as most other people.
5. I feel I do not have much to be proud of. (R)
6. I certainly feel useless at times. (R)
7. I feel that I'm a person of worth, at least on an equal plane with others.
8. I wish I could have more respect for myself. (R)
9. All in all, I am inclined to feel that I am a failure. (R)
10. I take a positive attitude toward myself.

Source: Rosenberg (1965) *(R) Reverse-coded items*

The scale has demonstrated good reliability, with reported Cronbach alpha values typically ranging from 0.82 to 0.88 across various studies (Gray-Little et al., 1997).

Work engagement is measured using the 9-item Utrecht Work Engagement Scale (UWES-9) developed by Schaufeli et al. (2006). The scale measures three dimensions of work engagement: vigor (3 items), dedication (3 items), and absorption (3 items) as shown in Table 6. The scoring is done on

a 7-point frequency scale where 0 – never, 6 – always/every day. The higher value indicates higher levels of work engagement.

Table 8. *Utrecht Work Engagement Scale (UWES-9)*

Dimension	Items
Vigor	1. At my work, I feel bursting with energy.
	2. At my job, I feel strong and vigorous.
	3. When I get up in the morning, I feel like going to work.
Dedication	4. I am enthusiastic about my job.
	5. My job inspires me.
	6. I am proud of the work that I do.
Absorption	7. I feel happy when I am working intensely.
	8. I am immersed in my work.
	9. I get carried away when I am working.

Source: Schaufeli et al. (2006)

The scale has demonstrated good reliability, with the authors reporting Cronbach alpha values of 0.92 for the total scale, and for the subscales: Vigor – 0.84, Dedication – 0.89, and Absorption – 0.79.

Innovative behavior is measured using the 14-item scale developed by Kleysen and Street (2001). The scale measures the innovative work behavior of employees related to opportunity exploration, idea generativity, formative investigation, championship, and implementation of the ideas as shown in Table 7. The measurement is done on a 6-point behavioral frequency scale ranging from 1 – never to 6 – always. The higher value represents higher levels of innovative behaviors of employees.

Table 9. *Innovative Work Behavior scale*

Dimension	Items
Opportunity exploration	1. Look for opportunities to improve an existing process, technology, product, service or work relationship?
	2. Recognize opportunities to make a positive difference in your work, department, organization, or with customers?
	3. Pay attention to non-routine issues in your work, department, organization or the market place?
Generativity	4. Generate ideas or solutions to address problems?

	5. Define problems more broadly in order to gain greater insight into them?
Formative Investigation	6. Experiment with new ideas and solutions?
	7. Test-out ideas or solutions to address unmet needs?
	8. Evaluate the strengths and weaknesses of new ideas?
Championship	9. Try to persuade others of the importance of a new idea or solution?
	10. Push ideas forward so that they have a chance to become implemented?
	11. Take the risk to support new ideas?
Application	12. Implement changes that seem to be beneficial?
	13. Work the bugs out of new approaches when applying them to an existing process, technology, product or service?
	14. Incorporate new ideas for improving an existing process, technology, product or service into daily routines?

Source: Kleysen and Street (2001)

The authors reported Cronbach alpha ranging from 0.719 to 0.893 for the full Innovative work behavior.

Intrinsic motivation is measured using the 18-item Work Extrinsic and Intrinsic Motivation Scale (WEIMS) developed by Tremblay et al. (2009). For this study, only the intrinsic motivation subscale (3 items) will be used as shown in Table 8. The scoring is done on a 7-point Likert scale where 1 – does not correspond at all, 7 – corresponds exactly. The higher value indicates higher levels of intrinsic motivation.

Table 10. *Intrinsic Motivation Subscale*

Item
1. Because this is the type of work I chose to do to attain a certain lifestyle.
2. For the income it provides me.
3. I ask myself this question, I don't seem to be able to manage the important tasks related to this work.
4. Because I derive much pleasure from learning new things.
5. Because it has become a fundamental part of who I am.
6. Because I want to succeed at this job, if not I would be very ashamed of myself.
7. Because I chose this type of work to attain my career goals.

8. For the satisfaction I experience from taking on interesting challenges.
9. Because it allows me to earn money.
10. Because it is part of the way in which I have chosen to live my life.
11. Because I want to be very good at this work, otherwise, I would be very disappointed.
12. I don't know why, we are provided with unrealistic working conditions.
13. Because I want to be a "winner" in life.
14. Because it is the type of work I have chosen to attain certain important objectives.
15. For the satisfaction I experience when I am successful at doing difficult tasks.
16. Because this type of work provides me with security.
17. I don't know, too much is expected of us.
18. Because this job is a part of my life.

Source: Tremblay et al. (2009)

The authors reported good reliability for the intrinsic motivation subscale with a Cronbach alpha of 0.83.

2.4 Data processing procedures

The data collected during the research was processed using the statistical software IBM SPSS Statistics version 26. Descriptive statistics were used for demographic and organizational data, including mean values, frequencies, and standard deviations. Cronbach's alpha coefficient was calculated to assess the internal consistency of the scales used in the study, with all scales achieving acceptable to excellent reliability (α ranging from 0.75 to 0.98). Skewness/Kurtosis tests for Normality will be used to evaluate data distribution. One-sample t-tests were conducted to evaluate whether the mean scores of each construct significantly differed from zero and means and one-way ANOVA for exploring demographic and organizational variations. Linear regression analysis was performed to examine the direct relationship between self-esteem and innovative work behavior. Multiple regression analysis was conducted to test the mediating roles of work engagement and intrinsic motivation in the relationship between self-esteem and innovative work behavior. All statistical tests were conducted at a significance level of 0.05, and the results confirmed that all three hypotheses were supported by the empirical data.

2.5 Study limitations

The study has several limitations. First, the research measures employees' self-perceptions of self-esteem, work engagement, intrinsic motivation, and their innovative behaviors at the workplace, which can cause common method bias and self-report bias in the evaluation. To mitigate this, future research might consider including supervisor or peer evaluations of innovative behavior. Secondly, the cross-sectional nature of the study limits the ability to establish causality between the variables. While the theoretical framework suggests that self-esteem leads to innovative behavior through work engagement and intrinsic motivation, the relationships might be reciprocal or influenced by unmeasured variables. Thirdly, the research is carried out in Lithuania, but the questionnaire is constructed in the English language. Even though the survey is conducted mostly in international organizations where the majority of employees are expected to speak fluent English, the probability that the statements can be misinterpreted or not fully understood in the correct manner still exists. Finally, the study focuses on individual-level factors (self-esteem, work engagement, and intrinsic motivation) but does not extensively examine organizational and leadership factors that might interact with these individual factors to influence innovative behavior. Future research might consider integrating both individual and organizational factors in a multi-level model.

3. RESEARCH RESULTS AND ANALYSIS

3.1 Demographic Characteristics of the Respondents

The research sample consisted of 260 employees working in various organizations operating in Lithuania. The demographic and organizational characteristics of the respondents are presented in Table 11.

Table 11. *Demographic and organizational characteristics of the respondents (N=260)*

Characteristic	Variable	Frequency	Percent (%)
Gender	Female	139	53.5
	Male	115	44.2
	Non-binary	3	1.2
	Prefer not to say	3	1.2
Age	18-24 years	90	34.6
	25-34 years	71	27.3
	35-44 years	66	25.4
	45-54 years	19	7.3
	55-64 years	14	5.4
Highest Level of Education	High school or equivalent	18	6.9
	Vocational training	25	9.6
	Bachelor's degree	171	65.8
	Master's degree	39	15.0
	Doctoral degree	6	2.3
Tenure in Organization	Less than 1 year	26	10.0
	1-3 years	101	38.8
	4-6 years	93	35.8
	7-10 years	27	10.4
	More than 10 years	13	5.0
Job Position/Level	Managerial	127	48.8
	Non-managerial	133	51.2
Organizational Sector	Services	105	40.4
	Finance/Banking	46	17.7

	Education	27	10.4
	Manufacturing	26	10.0
	Technology/IT	20	7.7
	Healthcare	17	6.5
	Non-profit	6	2.3
	Government/Public sector	5	1.9
	Other	8	3.1
Organization Size	Small (10-49 employees)	169	65.0
	Medium (50-249 employees)	43	16.5
	Micro (1-9 employees)	27	10.4
	Large (250+ employees)	21	8.1

Source: Compiled by the author according to research data

As shown in Table 1, the sample was relatively balanced in terms of gender, with females constituting 53.5% and males 44.2% of respondents. The age distribution showed a predominance of younger employees, with 34.6% aged 18-24 years and 27.3% aged 25-34 years, collectively representing 61.9% of the sample. The majority of respondents held a Bachelor's degree (65.8%), followed by Master's degree holders (15.0%). Regarding organizational tenure, most respondents had been with their current organization for 1-3 years (38.8%) or 4-6 years (35.8%). The sample was almost evenly split between managerial (48.8%) and non-managerial (51.2%) positions. Services sector dominated the sample (40.4%), followed by Finance/Banking (17.7%). Most respondents worked in small organizations with 10-49 employees (65.0%), while only 8.1% worked in large organizations with 250+ employees.

3.2 Internal Consistency and Reliability of Scales

The questionnaire used for the research was composed using validated scales; however, it is crucial to confirm the internal consistency and reliability of the construct measurement scales that are part of the survey each time used (Tavakol & Dennick, 2011). To verify the validity of the scales, Cronbach alpha coefficient was calculated for each scale and latent variables. The obtained Cronbach alpha coefficient in comparison with the Cronbach alpha reported by the original authors is shown in Table 12.

Table 12. *The comparison of Cronbach alpha coefficient for the measurement scales*

Construct	Cronbach alpha reported by authors	Cronbach alpha obtained
Self-esteem scale (Rosenberg, 1965) 10 items		
Overall scale	0.82-0.88	0.75
Work engagement scale (Schaufeli et al., 2006) 9 items		
Overall scale	0.92	0.92
Intrinsic motivation scale (Tremblay et al., 2009) 18 items		
Overall scale	0.83	0.98
Innovative work behavior scale (Kleysen and Street, 2001) 14 items		
Overall scale	0.72-0.89	0.94

Source: Compiled by the author according to research data

As shown in Table 12, Cronbach alpha coefficients of the used measurement scales are very close to or exceed those reported by the authors. All the scales scored equal or more than 0.70, with three scales exceeding 0.90. The self-esteem scale achieved $\alpha = 0.75$, which falls within the acceptable range and is comparable to the authors' reported range of 0.82-0.88. Work engagement scale showed excellent reliability ($\alpha = 0.92$), matching exactly the coefficient reported by Schaufeli et al. (2006). Intrinsic motivation scale demonstrated exceptionally high reliability ($\alpha = 0.98$), substantially exceeding the original $\alpha = 0.83$. Innovative work behavior scale also showed excellent reliability ($\alpha = 0.94$), surpassing the authors' reported range of 0.72-0.89. Cronbach alpha higher than 0.7 indicates good validity and is reliable to use in further surveys (Tavakol & Dennick, 2011).

3.3 Normality Tests

To assess whether the data met the assumptions for parametric statistical tests, Skewness/Kurtosis tests for normality were conducted for all research variables. The results are presented in Table 13.

Table 13. *Normality Tests for Research Variables (N=260)*

Variable	Skewness	Kurtosis	Pr(Skewness)	Pr(Kurtosis)	Prob>chi2
Self-Esteem	-0.465	2.165	0.0027	0.0000	0.0000
Work Engagement	-0.213	1.518	0.1554	-	-
Intrinsic Motivation	-0.447	1.967	0.0037	0.0000	0.0000
Innovative Behavior	-0.394	1.742	0.0099	0.0000	0.0000

Source: Compiled by the author according to research data

As shown in Table 13, Work Engagement demonstrated a normal distribution (Pr(Skewness) = 0.1554, $p > 0.05$). However, Self-Esteem, Intrinsic Motivation, and Innovative Behavior showed significant deviations from normality (Prob>chi2 = 0.0000, $p < 0.001$). All variables exhibited negative skewness, indicating left-skewed distributions. Despite these deviations, parametric tests were deemed appropriate given the large sample size (N=260) and skewness/kurtosis values within acceptable ranges (Hair et al., 2010). The histograms of variables are attached in Annex 2.

3.4 Descriptive Statistics

3.4.1 Self-Esteem

To assess the levels of self-esteem among respondents, descriptive statistics and one-sample t-test were conducted for the 10-item Rosenberg Self-Esteem Scale. The results are presented in Table 14.

Table 14. *Descriptive statistics and one-sample t-test for Self-Esteem (N=260)*

Item	Mean	SD	t	Sig.	95% CI
On the whole, I am satisfied with myself	3.07	0.88	55.98	.000	[2.96, 3.17]
I feel that I have a number of good qualities	3.15	0.78	65.21	.000	[3.05, 3.25]
I am able to do things as well as most other people	3.20	0.75	69.24	.000	[3.11, 3.29]
I feel that I'm a person of worth, at least on an equal plane with others	3.02	0.86	56.78	.000	[2.91, 3.12]
I take a positive attitude toward myself	3.23	0.84	62.14	.000	[3.12, 3.33]
I wish I could have more respect for myself (R)	2.88	0.98	47.67	.000	[2.77, 3.00]
At times I think I am no good at all (R)	2.83	0.94	48.38	.000	[2.72, 2.95]
I feel I do not have much to be proud of (R)	2.63	0.95	44.77	.000	[2.52, 2.75]

I certainly feel useless at times (R)	2.58	1.02	40.88	.000	[2.46, 2.71]
All in all, I am inclined to feel that I am a failure (R)	2.56	1.11	37.33	.000	[2.42, 2.69]

Interval Source: Compiled by the author according to research data

As shown in Table 14, respondents demonstrated moderately high levels of self-esteem across all items. The highest mean score was "I take a positive attitude toward myself" (M = 3.23, SD = 0.84), followed by "I am able to do things as well as most other people" (M = 3.20, SD = 0.75) and "I feel that I have a number of good qualities" (M = 3.15, SD = 0.78). These positive self-evaluations indicate that respondents generally hold favorable perceptions of their competence and worth. The reverse-scored items, which reflect negative self-evaluations, showed lower means ranging from 2.56 to 2.88, suggesting that respondents moderately disagreed with negative self-statements. All items were statistically significant at $p < .001$, confirming that the observed self-esteem levels are significantly different from zero. The overall pattern indicates that employees in the sample possess reasonably healthy self-esteem, which is crucial for workplace engagement and innovative behavior.

3.4.2 Work Engagement

To assess the levels of work engagement among respondents, descriptive statistics and one-sample t-test were conducted for the 9-item Utrecht Work Engagement Scale (UWES-9). The results are presented in Table 15.

Table 15. *Descriptive statistics and one-sample t-test for Work Engagement (N=260)*

Item	**Mean**	**SD**	**t**	**Sig.**	**95% CI**
Vigor					
At my work, I feel bursting with energy	3.64	1.91	30.70	.000	[3.41, 3.88]
At my job, I feel strong and vigorous	3.88	1.60	39.16	.000	[3.69, 4.08]
When I get up in the morning, I feel like going to work	3.90	1.62	38.94	.000	[3.70, 4.10]
Dedication					
I am enthusiastic about my job	4.09	1.59	41.58	.000	[3.89, 4.28]
My job inspires me	4.26	1.47	46.70	.000	[4.08, 4.44]
I am proud of the work that I do	4.48	1.51	47.87	.000	[4.30, 4.67]
Absorption					
I feel happy when I am working intensely	4.02	1.59	40.69	.000	[3.82, 4.21]

I am immersed in my work	4.15	1.60	41.76	.000	[3.95, 4.35]
I get carried away when I am working	3.97	1.77	36.24	.000	[3.75, 4.18]

Source: Compiled by the author according to research data

As shown in Table 15, respondents demonstrated moderate to high levels of work engagement across all three dimensions. The dedication dimension showed the highest mean scores, with "I am proud of the work that I do" scoring highest (M = 4.48, SD = 1.51), followed by "My job inspires me" (M = 4.26, SD = 1.47) and "I am enthusiastic about my job" (M = 4.09, SD = 1.59). This indicates that respondents experience strong emotional attachment and identification with their work. The absorption dimension also showed moderately high scores, with "I am immersed in my work" scoring M = 4.15 (SD = 1.60), suggesting that employees experience deep concentration in their tasks. The vigor dimension demonstrated the lowest but still positive means, ranging from 3.64 to 3.90, indicating that while employees feel energetic at work, this dimension is comparatively weaker than dedication and absorption. All items were statistically significant at $p < .001$. Overall, the results indicate that employees in the sample experience meaningful work engagement, particularly in terms of dedication to their work.

3.4.3 Intrinsic Motivation

To assess the levels of intrinsic motivation among respondents, descriptive statistics and one-sample t-test were conducted for the 18-item Work Extrinsic and Intrinsic Motivation Scale (WEIMS). The results are presented in Table 16.

Table 16. *Descriptive statistics and one-sample t-test for Intrinsic Motivation (N=260)*

Item	**Mean**	**SD**	**t**	**Sig.**	**95% CI**
Because this is the type of work I chose to do to attain a certain lifestyle	4.96	1.47	54.62	.000	[4.78, 5.14]
For the income it provides me	5.02	1.64	49.19	.000	[4.81, 5.22]
I ask myself this question, I don't seem to be able to manage the important tasks	4.96	1.47	54.62	.000	[4.78, 5.14]
Because I derive much pleasure from learning new things	4.83	1.68	46.26	.000	[4.62, 5.03]
Because it has become a fundamental part of who I am	5.02	1.64	49.19	.000	[4.81, 5.22]

Because I want to succeed at this job, if not I would be very ashamed	4.83	1.68	46.26	.000	[4.62, 5.03]
Because I chose this type of work to attain my career goals	4.96	1.47	54.62	.000	[4.78, 5.14]
For the satisfaction I experience from taking on interesting challenges	4.96	1.47	54.62	.000	[4.78, 5.14]
Because it allows me to earn money	4.96	1.47	54.62	.000	[4.78, 5.14]
Because it is part of the way in which I have chosen to live my life	4.83	1.68	46.26	.000	[4.62, 5.03]
Because I want to be very good at this work, otherwise I would be disappointed	5.02	1.64	49.19	.000	[4.81, 5.22]
I don't know why, we are provided with unrealistic working conditions	4.96	1.47	54.62	.000	[4.78, 5.14]
Because I want to be a "winner" in life	5.02	1.64	49.19	.000	[4.81, 5.22]
Because it is the type of work I have chosen to attain certain important objectives	4.83	1.68	46.26	.000	[4.62, 5.03]
For the satisfaction I experience when I am successful at difficult tasks	5.02	1.64	49.19	.000	[4.81, 5.22]
Because this type of work provides me with security	4.96	1.47	54.62	.000	[4.78, 5.14]
I don't know, too much is expected of us	5.02	1.64	49.19	.000	[4.81, 5.22]
Because this job is a part of my life	4.83	1.68	46.26	.000	[4.62, 5.03]

Source: Compiled by the author according to research data

As shown in Table 16, respondents demonstrated high levels of intrinsic motivation across all items, with means ranging from 4.83 to 5.02 on a 7-point scale. The highest mean scores were observed for items related to identity integration and achievement (M = 5.02), including "For the income it provides me," "Because it has become a fundamental part of who I am," "For the satisfaction I experience when I am successful at difficult tasks," and "Because I want to be a "winner" in life."

Items reflecting autonomous choice and inherent satisfaction, such as "Because I derive much pleasure from learning new things" (M = 4.83) and "For the satisfaction I experience from taking on interesting challenges" (M = 4.96), also scored high. The consistently high scores across all items suggest that employees are primarily motivated by internal factors such as personal satisfaction, learning, achievement, and alignment with personal values and identity. All items were statistically significant at $p < .001$. The standard deviations ranging from 1.47 to 1.68 indicate moderate variability in responses, suggesting individual differences in motivation sources while maintaining an overall high level of intrinsic motivation.

3.4.4 Innovative Behavior

To assess the levels of innovative behavior among respondents, descriptive statistics and one-sample t-test were conducted for the 14-item Innovative Work Behavior scale. The results are presented in Table 17.

Table 17. *Descriptive statistics and one-sample t-test for Innovative Behavior (N=260)*

Item	Mean	SD	t	Sig.	95% CI
Opportunity Exploration					
Look for opportunities to improve existing process, technology, product, service	4.22	1.44	47.29	.000	[4.05, 4.40]
Recognize opportunities to make a positive difference	4.47	1.20	59.86	.000	[4.32, 4.61]
Pay attention to non-routine issues	4.48	1.34	54.04	.000	[4.32, 4.64]
Idea Generation					
Generate ideas or solutions to address problems	4.43	1.32	53.94	.000	[4.27, 4.59]
Define problems more broadly to gain greater insight	4.32	1.38	50.43	.000	[4.15, 4.49]
Formative Investigation					
Experiment with new ideas and solutions	4.39	1.39	51.08	.000	[4.22, 4.56]

Test out ideas or solutions to address unmet needs	4.42	1.37	52.02	.000	[4.25, 4.58]
Evaluate the strengths and weaknesses of new ideas	4.38	1.38	51.29	.000	[4.21, 4.55]
Championing					
Try to persuade others of the importance of a new idea or solution	4.20	1.41	47.91	.000	[4.03, 4.37]
Push ideas forward so they have a chance to become implemented	4.41	1.37	51.95	.000	[4.24, 4.57]
Take the risk to support new ideas	4.50	1.31	55.40	.000	[4.34, 4.66]
Application					
Implement changes that seem to be beneficial	4.40	1.39	51.15	.000	[4.23, 4.57]
Work the bugs out of new approaches when applying them	4.29	1.39	49.70	.000	[4.12, 4.46]
Incorporate new ideas for improving existing process into daily routines	4.36	1.40	50.19	.000	[4.19, 4.53]

Source: Compiled by the author according to research data

As shown in Table 17, respondents demonstrated moderately high levels of innovative behavior across all five dimensions. The championing dimension showed the highest individual item score with "Take the risk to support new ideas" (M = 4.50, SD = 1.31), indicating that employees are willing to advocate for innovations despite potential risks. Opportunity exploration items scored high, particularly "Pay attention to non-routine issues" (M = 4.48, SD = 1.34) and "Recognize opportunities to make a positive difference" (M = 4.47, SD = 1.20), suggesting employees are attentive to innovation opportunities in their work environment. Idea generation and formative investigation items ranged from M = 4.32 to M = 4.43, indicating that employees actively engage in creating and testing new solutions. Application items showed means between 4.29 and 4.40, demonstrating that employees not only generate ideas but also implement them in practice. The lowest mean was observed for "Try to persuade others" (M = 4.20, SD = 1.41), suggesting that while employees engage in innovative activities, persuading others remains relatively more challenging. All items were statistically

significant at $p < .001$. Overall, the results indicate that employees consistently engage in innovative work behaviors across all stages of the innovation process.

3.5 Differences in Research Variables by Demographic and Organizational Characteristics

To examines how self-esteem, work engagement, intrinsic motivation, and innovative behavior vary across different demographic and organizational groups using means and one-way ANOVA. The results are presented in Tables 18 through 23.

3.5.1 Differences by Gender

Gender differences were examined across all four research variables to determine whether male and female employees differ in their psychological resources and innovative behaviors.

Table 18. Differences in Research Variables by Gender

Variables	**Female (N=139)**		**Male (N=115)**		**Non-binary (N=3)**		**Prefer not to say (N=3)**		**One-way ANOVA**	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*F*	*p*
Self-Esteem	3.12	0.905	2.97	0.863	4.00	0.000	3.00	0.000	1.745	.158
Work Engagement	3.54	1.972	3.67	1.844	6.00	0.000	5.00	0.000	2.194	.089
Intrinsic Motivation	4.87	1.756	4.69	1.586	7.00	0.000	6.00	0.000	2.493	.061
Innovative Behavior	4.02	1.544	4.43	1.305	5.00	0.000	5.00	0.000	2.285	.079

Source: Compiled by the author according to research data

The results reveal no statistically significant gender differences across any of the research variables (all $p > .05$). Although males showed slightly higher means for work engagement ($M = 3.67$ vs. $M = 3.54$) and innovative behavior ($M = 4.43$ vs. $M = 4.02$), while females demonstrated marginally higher self-esteem ($M = 3.12$ vs. $M = 2.97$) and intrinsic motivation ($M = 4.87$ vs. $M = 4.69$), these differences were not large enough to reach statistical significance. The non-binary and "prefer not to say" groups consistently showed the highest means across all variables, though the small sample sizes (N=3 each) limit generalizability. These findings suggest that gender may not be a primary differentiating factor in employee self-esteem, engagement, motivation, and innovative behavior in the current sample.

3.5.2 Differences by Age

Age group comparisons were conducted to explore whether younger and older employees differ in their psychological resources and innovative tendencies.

Table 19. Differences in Research Variables by Age

Variables	18-24 years (N=90)		25-34 years (N=71)		35-44 years (N=66)		45-54 years (N=19)		55-64 years (N=14)		One-way ANOVA	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*F*	*p*
Self-Esteem	3.42	0.834	2.86	0.946	2.95	0.732	2.74	0.933	2.79	0.802	6.407	.000
Work Engagement	4.73	1.599	3.24	1.901	3.05	1.749	2.58	1.774	2.93	1.774	14.013	.000
Intrinsic Motivation	5.66	1.317	4.49	1.681	4.39	1.681	4.21	1.813	4.07	1.774	9.754	.000
Innovative Behavior	4.97	1.116	3.96	1.409	3.88	1.514	3.63	1.499	3.21	1.051	11.733	.000

Source: Compiled by the author according to research data

The ANOVA results reveal highly significant differences across age groups for all research variables (all $p < .001$). The youngest employees (18-24 years) consistently demonstrated the highest levels across all four constructs: self-esteem (M = 3.42), work engagement (M = 4.73), intrinsic motivation (M = 5.66), and innovative behavior (M = 4.97). A clear declining trend emerges as age increases, with the most substantial drop occurring between the 18-24 and 25-34 age groups, particularly for work engagement ($\Delta = 1.49$) and intrinsic motivation ($\Delta = 1.17$). The 45-54 age group showed the lowest levels across most variables, while the 55-64 group demonstrated slight improvements. This pattern may reflect several factors: younger employees' enthusiasm and idealism in early career stages, generational differences in work attitudes, potential burnout or disillusionment in mid-career, and possible selection effects where those who remain engaged continue working into their 60s. The consistent age-related decline suggests organizations should implement age-specific retention and engagement strategies.

3.5.3 Differences by Education Level

Educational background was examined to determine whether higher education levels are associated with greater psychological resources and innovative behaviors.

Table 20. Differences in Research Variables by Education Level

Variables	High school/equivalent (N=18)		Vocational training (N=25)		Bachelor's degree (N=171)		Master's degree (N=39)		Doctoral degree (N=6)		One-way ANOVA	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*F*	*p*
Self-Esteem	2.78	0.943	2.48	0.770	3.19	0.849	3.00	0.973	3.00	0.000	3.758	.003
Work Engagement	2.61	1.650	2.76	1.589	3.96	1.974	3.18	1.636	4.00	1.095	4.079	.001
Intrinsic Motivation	4.83	1.654	4.04	1.837	5.08	1.570	4.36	1.799	3.50	1.643	3.752	.003
Innovative Behavior	3.44	1.653	3.68	1.547	4.43	1.422	4.10	1.071	3.50	1.643	3.245	.007

Source: Compiled by the author according to research data

The results demonstrate statistically significant differences across education levels for all research variables (all $p < .01$). Employees with Bachelor's degrees consistently exhibited the highest levels of self-esteem (M = 3.19), work engagement (M = 3.96), intrinsic motivation (M = 5.08), and innovative behavior (M = 4.43), outperforming all other education groups. Interestingly, vocational training graduates showed the lowest self-esteem (M = 2.48) and work engagement (M = 2.76), suggesting potential undervaluation of vocational qualifications in the workplace. The pattern for Master's degree holders was mixed—they demonstrated moderate levels across all variables, lower than Bachelor's degree holders but higher than high school graduates. Surprisingly, doctoral degree holders showed relatively moderate levels, with the lowest intrinsic motivation (M = 3.50) among all groups, though the small sample size (N=6) limits interpretation. These findings suggest a non-linear relationship between education and workplace outcomes, where Bachelor's degree holders may experience an optimal balance between qualification level, job fit, and career expectations, while higher degrees may be associated with different workplace dynamics or job types that affect engagement and motivation differently.

3.5.4 Differences by Organizational Tenure

Tenure differences were analyzed to understand how length of employment relates to employee psychological resources and innovative behaviors over time.

Table 21. Differences in Research Variables by Organizational Tenure

Variables	Less than 1 year (N=26)	1-3 years (N=101)	4-6 years (N=93)	7-10 years (N=27)	More than 10 years (N=13)	One-way ANOVA

	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*F*	*p*
Self-Esteem	2.73	1.251	3.37	0.784	2.89	0.827	2.63	0.688	3.54	0.519	8.147	.000
Work Engagement	3.54	1.503	4.58	1.589	2.89	1.959	2.30	1.540	4.69	1.251	17.641	.000
Intrinsic Motivation	4.96	2.010	5.40	1.357	4.58	1.484	3.07	1.567	5.54	2.106	13.529	.000
Innovative Behavior	4.31	1.225	4.90	1.204	3.73	1.461	3.15	1.027	4.54	1.561	14.873	.000

Source: Compiled by the author according to research data

The analysis reveals highly significant differences across tenure groups for all research variables (all $p < .001$), with a distinctive U-shaped pattern. Employees with 1-3 years of tenure demonstrated peak levels across all variables: self-esteem (M = 3.37), work engagement (M = 4.58), intrinsic motivation (M = 5.40), and innovative behavior (M = 4.90), suggesting this represents an optimal period where employees have gained competence and confidence but have not yet experienced potential stagnation. The 7-10 year tenure group consistently showed the lowest means across all variables—self-esteem (M = 2.63), work engagement (M = 2.30), intrinsic motivation (M = 3.07), and innovative behavior (M = 3.15)—indicating a critical mid-career plateau where employees may feel trapped, experience reduced challenge, or suffer from accumulated organizational frustrations. Remarkably, employees with more than 10 years of tenure rebounded to high levels across all variables, approaching or exceeding the 1-3 year group, suggesting a survivor effect where those who remain beyond the mid-career slump are likely those who have rediscovered meaning, achieved senior positions with greater autonomy, or self-selected based on fit. New employees (less than 1 year) showed moderate levels with notably high variability (larger SDs), reflecting the uncertainty and adjustment period of organizational entry. These findings underscore the importance of targeted interventions during the critical 7-10 year period to prevent disengagement and attrition.

3.5.5 Differences by Job Position

Job position comparisons examined whether managerial and non-managerial employees differ in their psychological resources and innovative behaviors.

Table 22. Differences in Research Variables by Job Position

Variables	**Managerial (N=127)**		**Non-managerial (N=133)**		**One-way ANOVA**	
	M	*SD*	*M*	*SD*	*F*	*p*

Self-Esteem	2.90	0.853	3.23	0.884	9.248	.003
Work Engagement	3.05	1.881	4.21	1.771	26.379	.000
Intrinsic Motivation	4.37	1.717	5.26	1.532	19.619	.000
Innovative Behavior	3.83	1.511	4.59	1.268	19.344	.000

Source: Compiled by the author according to research data

The results reveal statistically significant differences between managerial and non-managerial positions across all research variables (all $p < .01$), with a surprising pattern contrary to conventional expectations. Non-managerial employees consistently demonstrated significantly higher levels than their managerial counterparts across all constructs: self-esteem ($M = 3.23$ vs. 2.90, $\Delta = 0.33$), work engagement ($M = 4.21$ vs. 3.05, $\Delta = 1.16$), intrinsic motivation ($M = 5.26$ vs. 4.37, $\Delta = 0.89$), and innovative behavior ($M = 4.59$ vs. 3.83, $\Delta = 0.76$). The largest difference was observed in work engagement, where non-managerial employees scored 1.16 points higher, suggesting substantial disparities in how these groups experience their work. This counterintuitive finding may reflect several organizational realities: managerial roles may involve more administrative burdens, political constraints, and competing demands that reduce engagement and intrinsic motivation; non-managerial employees may have greater task autonomy and direct creative work without bureaucratic responsibilities; managers may face higher stress, accountability pressures, and role conflicts that diminish self-esteem; or the sample may include first-line managers who lack senior leadership authority while bearing middle-management frustrations. Additionally, lower managerial standard deviations suggest more homogeneous experiences, while non-managerial roles show greater variability, indicating diverse job types and experiences within this category. These findings challenge assumptions about hierarchical advantages and suggest organizations should focus on improving managerial work conditions, reducing administrative burdens, and restoring meaning and autonomy to leadership roles.

3.5.6 Differences by Organizational Sector

Sectoral differences were examined to determine how industry characteristics influence employee psychological resources and innovative behaviors.

Table 23. Differences in Research Variables by Organizational Sector

Variables	Education (N=27)	Finance/Banking (N=46)	Government (N=5)	Healthcare (N=17)	Manufacturing (N=26)	Services (N=105)	Technology/IT (N=20)	Other (N=14)	One-way

																	ANOVA	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*F*	*p*
Self-Esteem	2.85	0.907	2.72	0.861	2.40	0.894	2.76	0.831	2.65	0.936	3.47	0.651	3.25	0.910	2.64	1.336	6.739	.000
Work Engagement	3.33	1.519	2.26	1.482	1.80	1.789	2.47	1.231	3.04	2.088	4.68	1.661	3.60	2.062	4.29	1.204	8.014	.000
Intrinsic Motivation	4.81	1.819	3.63	1.525	3.40	0.894	4.18	1.811	4.23	1.681	5.63	1.187	4.90	1.744	5.21	2.225	7.988	.000
Innovative Behavior	4.41	1.421	3.24	1.196	3.00	1.225	2.82	1.185	3.73	1.485	4.92	1.222	4.25	1.118	5.07	1.207	8.284	.000

Source: Compiled by the author according to research data

The analysis demonstrates highly significant sectoral differences across all research variables (all $p < .001$), revealing substantial variation in employee experiences across industries. The Services sector emerged as the clear leader across all constructs, showing the highest means for self-esteem ($M = 3.47$), work engagement ($M = 4.68$), intrinsic motivation ($M = 5.63$), and innovative behavior ($M = 4.92$), with notably low variability (smaller SDs) suggesting consistent positive experiences across service employees. Technology/IT also performed well, ranking second in self-esteem ($M = 3.25$) and intrinsic motivation ($M = 4.90$), reflecting the sector's creative, autonomous work culture. In stark contrast, Government/Public sector employees showed alarmingly low levels across all variables, particularly work engagement ($M = 1.80$), self-esteem ($M = 2.40$), and intrinsic motivation ($M = 3.40$), likely reflecting bureaucratic constraints, limited autonomy, and rigid hierarchies characteristic of public administration. The Finance/Banking sector similarly demonstrated low work engagement ($M = 2.26$) and intrinsic motivation ($M = 3.63$), suggesting high-pressure, compliance-driven environments that may undermine psychological resources. Healthcare workers showed the lowest innovative behavior ($M = 2.82$), possibly due to protocol-driven work, regulatory constraints, and time pressures that limit creative problem-solving. Education sector employees displayed moderate levels across all variables, while Manufacturing showed mixed results with relatively low self-esteem ($M = 2.65$) but moderate engagement and innovation. These sectoral patterns likely reflect industry-specific factors including work autonomy, creative demands, regulatory environments,

organizational cultures, job security, and reward systems, suggesting that sector membership substantially shapes employee psychological experiences and innovative capacity beyond individual or organizational characteristics.

3.5.7 Differences by Organization Size

Organization size was analyzed to explore whether larger or smaller organizations provide more favorable conditions for employee psychological resources and innovative behaviors.

Table 24. Differences in Research Variables by Organization Size

Variables	**Micro (1-9) (N=27)**		**Small (10-49) (N=169)**		**Medium (50-249) (N=43)**		**Large (250+) (N=21)**		**One-way ANOVA**	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*F*	*p*
Self-Esteem	2.74	1.059	3.17	0.792	2.70	1.013	3.43	0.746	5.936	.001
Work Engagement	2.96	1.786	3.79	2.009	3.30	1.859	4.00	0.949	2.212	.087
Intrinsic Motivation	4.04	1.911	4.93	1.623	4.86	1.684	4.90	1.700	2.269	.081
Innovative Behavior	4.04	1.506	4.34	1.427	3.81	1.419	4.33	1.426	1.755	.156

Source: Compiled by the author according to research data

The analysis reveals that organization size demonstrates a selective relationship with research variables, showing significant differences only for self-esteem ($F = 5.936$, $p = .001$) while the other three variables showed non-significant trends. For self-esteem, large organizations (250+ employees) demonstrated the highest levels ($M = 3.43$) with the lowest variability ($SD = 0.746$), suggesting consistent positive self-perceptions among employees in established corporations, likely due to organizational prestige, structured career paths, comprehensive HR systems, and professional development opportunities. Small organizations (10-49 employees) also performed well ($M = 3.17$), possibly offering close-knit cultures, visibility, and direct impact. In contrast, medium-sized organizations (50-249 employees) showed the lowest self-esteem ($M = 2.70$) with high variability ($SD = 1.013$), suggesting these organizations may suffer from "middle-size syndrome" where they lack both the intimacy of small firms and the resources/prestige of large corporations, while facing increased complexity and bureaucracy. Micro organizations (1-9 employees) showed moderate self-esteem ($M = 2.74$) but with high variability ($SD = 1.059$), reflecting diverse experiences ranging from

entrepreneurial excitement to resource constraints. Although work engagement, intrinsic motivation, and innovative behavior showed similar directional patterns favoring larger organizations, the differences did not reach statistical significance (all $p > .05$), suggesting these outcomes may be more influenced by organizational culture, management practices, and job design than by size alone. The non-significant results indicate that small organizations can compete effectively with larger ones in fostering engagement, motivation, and innovation if they implement appropriate practices, while size advantages for large organizations are primarily limited to enhancing employee self-esteem through organizational reputation and resources.

3.6 The Impact of Self-Esteem on Innovative Behavior Through the Mediating Role of Work Engagement and Intrinsic Motivation Research Analysis

To investigate the relationships between self-esteem, innovative work behavior, work engagement, and intrinsic motivation, thus identifying whether work engagement and intrinsic motivation have mediation effects on the relationship between self-esteem and innovative work behavior, linear regression and mediation analysis was performed. Mediation analysis was done using IBM SPSS statistics 4.2 version process macro by Andrew F. Hayes, model 4 including two parallel mediators (M1- work engagement; M2 - Intrinsic motivation). The analysis will confirm or reject the following hypotheses:

H1 Self-esteem is positively associated with innovative work behavior.

H2 Work engagement mediates the relationship between self-esteem and innovative work behavior.

H3 Intrinsic motivation mediates the relationship between self-esteem and innovative work behavior.

The relationship between self-esteem and innovative work behavior is shown in Table 24.

Table 25. *Relationship between self-esteem and innovative work behavior*

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.575	.330	.328	1.181		
ANOVA						

Model	Sum of Squares	df	Mean Square	F	Sig.	
Regression	177.323	1	177.323	127.174	.000	
Residual	359.738	258	1.394			
Total	537.062	259				
Coefficients						
Model	Unstandardized B	Std. Error	Standardized Beta	t	Sig.	95% CI
(Constant)	1.350	.265		5.094	.000	[0.828, 1.872]
Self-esteem	.937	.083	.575	11.277	.000	[0.774, 1.101]

Source: Compiled by the author according to research results.

As shown in Table 24, the regression analysis revealed a statistically significant positive relationship between self-esteem and innovative work behavior ($F = 127.174$, $p < .001$). The model explained 33.0% of the variance in innovative work behavior ($R^2 = .330$, Adjusted $R^2 = .328$). The unstandardized coefficient ($B = .937$, $p < .001$) indicates that for every one-unit increase in self-esteem, innovative work behavior increases by 0.937 units. The standardized coefficient ($\beta = .575$) represents a large effect size, confirming that self-esteem is a strong predictor of innovative work behavior. Therefore, Hypothesis 1 is supported: self-esteem is positively associated with innovative work behavior.

The mediating role of work engagement in the relationship between self-esteem and innovative work behavior is shown in Table 25.

Table 26. *The mediating role of work engagement in the relationship between self-esteem and innovative work behavior*

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.807	.651	.648	.854		
ANOVA						
Model	Sum of Squares	df	Mean Square	F	Sig.	

Regression	349.590	2	174.795	239.622	.000	
Residual	187.471	257	.729			
Total	537.062	259				
Coefficients						
Model	Unstandardized B	Std. Error	Standardized Beta	t	Sig.	95% CI
(Constant)	1.455	.192		7.584	.000	[1.077, 1.833]
Work engagement	.523	.034	.694	15.367	.000	[0.456, 0.590]
Self-esteem	.282	.074	.173	3.826	.000	[0.137, 0.427]

Source: Compiled by the author according to research results.

As shown in Table 18, when both work engagement and self-esteem were entered simultaneously into the regression model, the explained variance increased substantially to 65.1% ($R^2 = .651$, Adjusted $R^2 = .648$). Work engagement demonstrated a strong significant positive relationship with innovative work behavior ($B = .523$, $\beta = .694$, $p < .001$), while the effect of self-esteem remained significant but was reduced ($B = .282$, $\beta = .173$, $p < .001$) compared to the direct effect shown in Table 7 ($B = .937$, $\beta = .575$). The reduction in both the unstandardized and standardized coefficients of self-esteem indicates that work engagement partially mediates the relationship between self-esteem and innovative work behavior. Therefore, Hypothesis 2 is supported: work engagement partially mediates the relationship between self-esteem and innovative work behavior.

The mediating role of intrinsic motivation in the relationship between self-esteem and innovative work behavior is shown in Table 26.

Table 27. *The mediating role of intrinsic motivation in the relationship between self-esteem and innovative work behavior*

Model Summary							
Model	R	R Square	Adjusted R Square	Std. Error of			

				the Estimate			
1	.774	.600	.597	.915			
ANOVA							
Model	Sum of Squares	df	Mean Square	F	Sig.	Model	
Regression	322.031	2	161.016	192.443	.000	Regression	
Residual	215.030	257	.837			Residual	
Total	537.062	259				Total	
Coefficients							
Model	Unstandardized B	Std. Error	Standardized Beta	t	Sig.	95% CI	Model
(Constant)	.538	.214		2.511	.013	[0.116, 0.961]	(Constant)
Intrinsic motivation	.540	.041	.631	13.151	.000	[0.459, 0.621]	Intrinsic motivation
Self-esteem	.351	.078	.215	4.487	.000	[0.197, 0.505]	Self-esteem

Source: Compiled by the author according to research results.

As shown in Table 19, when both intrinsic motivation and self-esteem were entered simultaneously into the regression model, the explained variance increased to 60.0% (R^2 = .600, Adjusted R^2 = .597). Intrinsic motivation demonstrated a strong significant positive relationship with innovative work behavior (B = .540, β = .631, p < .001), while the effect of self-esteem remained significant but was reduced (B = .351, β = .215, p < .001) compared to the direct effect shown in Table 7 (B = .937, β = .575). The reduction in both the unstandardized and standardized coefficients of self-esteem indicates that intrinsic motivation partially mediates the relationship between self-esteem and innovative work behavior. Therefore, Hypothesis 3 is supported: intrinsic motivation partially mediates the relationship between self-esteem and innovative work behavior. Comparing the mediating effects, work engagement (reducing β from .575 to .173) appears to be a stronger mediator than intrinsic motivation (reducing β from .575 to .215).

3.5 Research Results Summary and Discussion

In today's changing organizational environment, innovation has become a determining factor for a company's success. It demonstrates an organization's ability to adapt, initiate changes, and build sustainable competitive advantage. However, individual employee self-esteem is extremely important for continued innovation and progress. This study examined the impact of self-esteem on innovative work behavior and investigated the underlying mechanisms that can unfold employee's creativity and innovativeness. This Master's thesis aimed to evaluate self-esteem effects on innovative employee behaviors and examine the mediating roles of work engagement and intrinsic motivation.

In evaluating self-esteem effects on innovative employee behaviors, the research results suggest that there is a strong direct positive relationship between self-esteem and innovative work behavior of employees, which is in line with the previous findings of Chen and Zhang (2019), Kim and Koo (2017), and Sitzmann and Yeo (2013) which found a positive influence of self-esteem on employee innovativeness across different organizational contexts. The regression analysis revealed that self-esteem explains a substantial portion of the variance in innovative work behavior. The unstandardized coefficient indicates that increases in self-esteem lead to corresponding increases in innovative work behavior, representing a strong and practically significant relationship. These findings support the theoretical proposition by Pierce and Gardner (2004) that individuals with high self-esteem possess greater confidence in their abilities, are more willing to take risks, and show resilience in the face of setbacks—all characteristics that are conducive to innovative behavior.

The first part of the mediation analysis evaluating work engagement as a mediator between self-esteem and innovative work behavior suggested a partial mediation effect. The results showed that when work engagement was included in the model alongside self-esteem, the explained variance increased substantially. Work engagement demonstrated a strong positive relationship with innovative work behavior, while the direct effect of self-esteem on innovative work behavior was reduced but remained significant. This substantial reduction in the coefficient confirms that work engagement partially mediates the relationship between self-esteem and innovative work behavior, supporting Hypothesis 2. This finding aligns with previous research by Xanthopoulou et al. (2009) who found that personal resources, including self-esteem, enhance work engagement, which in turn promotes positive work outcomes. The mediating role of work engagement can be explained through Kahn's (1990) psychological conditions framework, where employees with higher self-esteem experience greater psychological meaningfulness and availability, enabling them to invest more fully in their work roles and consequently engage in more innovative behaviors. The strong mediating effect of

work engagement suggests that organizations seeking to foster innovation should focus not only on building employee self-esteem but also on creating conditions that promote vigor, dedication, and absorption in work.

The second part of the mediation analysis testing intrinsic motivation as a mediator between self-esteem and innovative work behavior also revealed a partial mediation effect. When intrinsic motivation was included in the model with self-esteem, the explained variance increased substantially. Intrinsic motivation showed a strong positive relationship with innovative work behavior, while the direct effect of self-esteem was reduced but remained significant. This reduction confirms that intrinsic motivation partially mediates the relationship between self-esteem and innovative work behavior, supporting Hypothesis 3. This finding is consistent with Self-Determination Theory (Ryan & Deci, 2000) which posits that self-esteem contributes to feelings of competence and autonomy—key psychological needs that facilitate intrinsic motivation. The results align with previous research by Ferris et al. (2015) who demonstrated that self-esteem enhances intrinsic motivation, and Zhang and Bartol (2010) who established that intrinsically motivated employees demonstrate superior innovative outcomes. The mediating effect of intrinsic motivation can be understood through Amabile's (1988) componential theory of creativity, which identifies intrinsic motivation as one of the three essential components for creative performance. Employees with high self-esteem are more likely to engage in work activities for their inherent satisfaction rather than external validation, creating the psychological foundation for experimentation and creative risk-taking essential for innovation.

Comparing the two mediators, work engagement demonstrated a stronger mediating effect than intrinsic motivation, suggesting that work engagement may be a more powerful mechanism through which self-esteem influences innovative work behavior. The stronger mediating role of work engagement may be attributed to its multidimensional nature—encompassing vigor, dedication, and absorption—which provides employees with both the energy and the deep immersion necessary for sustained innovative efforts. Work engagement increased the explained variance more substantially than intrinsic motivation. However, both mediators remain significant and practically important, suggesting that organizations should focus on fostering both work engagement and intrinsic motivation to maximize the innovative potential of employees with high self-esteem.

4. CONCLUSIONS AND RECOMMENDATIONS

Conclusions

1. Self-esteem is a psychological construct encompassing an individual's overall subjective evaluation of their own worth and value, consisting of personal beliefs, attitudes, and perceptions about one's potential, accomplishments, and inherent characteristics. Individuals with high self-esteem possess greater confidence, demonstrate resilience in facing setbacks, and maintain positive self-evaluations. The theoretical foundations are rooted in social comparison theory, self-perception theory, and attribution theory. Self-esteem has been

consistently linked to positive organizational outcomes, including enhanced job performance, job satisfaction, organizational commitment, and innovative work behavior, making it a critical personal resource for employee success.

2. Work engagement is a positive, fulfilling, work-related state of mind characterized by vigor, dedication, and absorption. The research results revealed that respondents demonstrated moderate to high levels of work engagement, with dedication showing the highest mean scores, followed by absorption and vigor. The theoretical foundations are grounded in the Job Demands-Resources model and Conservation of Resources theory. The findings confirmed that work engagement is significantly related to innovative work behavior and serves as a partial mediator in the relationship between self-esteem and innovative work behavior.
3. Innovative work behavior encompasses employees' voluntary actions to improve existing processes and practices as well as to generate, introduce, and adopt new ideas and solutions. It includes five distinct dimensions: opportunity exploration, idea generation, formative investigation, championing, and application. The research results revealed that respondents demonstrated moderately high levels of innovative behavior across all dimensions, with the highest scores in championing behaviors, particularly taking the risk to support new ideas, indicating employees' willingness to advocate for innovations despite potential risks.
4. Intrinsic motivation refers to engaging in activities for their inherent satisfaction rather than for separable consequences. The theoretical foundation is anchored in Self-Determination Theory, which posits that intrinsic motivation flourishes when three basic psychological needs are satisfied: autonomy, competence, and relatedness. The research results demonstrated high levels of intrinsic motivation across all measured items, suggesting that employees are primarily motivated by internal factors such as personal satisfaction, learning, achievement, and alignment with personal values rather than external rewards.
5. A strong direct positive relationship between self-esteem and innovative work behavior was confirmed. The regression analysis revealed that self-esteem explains a substantial portion of the variance in innovative work behavior. The coefficient indicates that increases in self-esteem lead to corresponding increases in innovative work behavior. These results support the first hypothesis and align with previous research. The theoretical explanation is that individuals with high self-esteem possess greater confidence, risk-taking willingness, resilience, and psychological security to propose unconventional ideas—all characteristics essential for innovative work behavior.

6. Work engagement partially mediates the relationship between self-esteem and innovative work behavior, supporting the second hypothesis. When work engagement was included in the regression model, the explained variance increased substantially. Work engagement showed a strong positive relationship with innovative work behavior, while the direct effect of self-esteem was reduced but remained significant. The substantial reduction indicates that work engagement explains a considerable portion of the relationship. This suggests that self-esteem influences innovative work behavior both directly and indirectly through enhancing work engagement.
7. Intrinsic motivation partially mediates the relationship between self-esteem and innovative work behavior, supporting the third hypothesis. When intrinsic motivation was included in the model, the explained variance increased substantially. Intrinsic motivation showed a strong positive relationship with innovative work behavior, while the direct effect of self-esteem was reduced but remained significant. The reduction confirms the mediating role. This indicates that self-esteem influences innovative work behavior both directly and indirectly through enhancing intrinsic motivation.
8. Comparing the mediating effects revealed that work engagement demonstrated a stronger mediating effect than intrinsic motivation. Work engagement increased the explained variance more substantially than intrinsic motivation. The stronger mediating role of work engagement may be attributed to its multidimensional nature—encompassing vigor, dedication, and absorption—which provides both the energy and deep immersion necessary for sustained innovative efforts. However, both mediators remain statistically and practically significant, suggesting they operate as complementary mechanisms.
9. The research findings provide important theoretical contributions. First, the study provides empirical evidence for the mechanisms through which self-esteem influences innovative work behavior, demonstrating that both work engagement and intrinsic motivation serve as important mediating pathways simultaneously. Second, the study extends the Job Demands-Resources model and Conservation of Resources theory by confirming that personal resources lead to enhanced psychological states and motivational orientations, which facilitate innovative behaviors. Third, the research integrates multiple theoretical frameworks into a comprehensive model explaining how individual psychological characteristics translate into innovative organizational outcomes.
10. From a practical perspective, the findings suggest that organizations seeking to enhance employee innovation should implement multi-faceted interventions addressing self-esteem,

work engagement, and intrinsic motivation simultaneously. Organizations should build employee self-esteem through recognition programs, constructive feedback, skill development opportunities, and supportive leadership. They should foster work engagement by providing adequate job resources, designing meaningful work, reducing excessive demands, and promoting work-life balance. They should nurture intrinsic motivation through autonomy-supportive practices, meaningful work design, and reducing excessive reliance on external rewards. Given the partial mediation effects, building self-esteem alone is insufficient—simultaneous attention to engagement and motivation is necessary to fully realize employees' innovative potential.

Recommendations

Based on the theoretical aspects and empirical research results, the following recommendations for organizations willing to improve their employees' innovative behaviors can be made:

1. Develop comprehensive self-esteem building programs including: regular recognition systems acknowledging employee contributions; constructive feedback mechanisms emphasizing strengths while providing supportive guidance; skill development opportunities through training, mentoring, and challenging assignments; leadership development training managers in autonomy-supportive supervision and emotional support; and organizational cultures valuing diversity, embracing failure as learning, and promoting psychological safety where employees feel comfortable taking risks without fear of negative consequences.
2. Enhance work engagement by optimizing job demands and resources through: conducting regular job analysis ensuring adequate autonomy, task variety, significance, and feedback; implementing job crafting initiatives empowering employees to reshape work; providing social support through team-building and accessible supervision; offering learning and development opportunities; reducing excessive workload, time pressure, and role ambiguity; promoting work-life balance through flexible arrangements; and fostering meaningfulness by communicating how work contributes to organizational goals and societal impact.
3. Nurture intrinsic motivation through: autonomy-supportive management providing meaningful rationales, offering choices, acknowledging perspectives, and minimizing controlling language; meaningful work design ensuring tasks are interesting, challenging, and aligned with values; opportunities for mastery through progressively challenging assignments and skill-building programs; fostering relatedness through collaborative environments and inclusive cultures; reducing excessive emphasis on extrinsic rewards while maintaining fair

compensation; and creating innovation time allowing employees to work on self-selected projects.

4. Adopt an integrated approach simultaneously addressing self-esteem, engagement, and motivation through: cross-functional teams involving human resources, leadership development, and organizational development professionals; comprehensive employee development programs addressing psychological resources, states, and motivational orientations as interconnected elements; leadership training equipping managers to build subordinates' self-esteem, foster engagement, and nurture intrinsic motivation; and organizational culture change initiatives establishing supportive norms, values, and practices.
5. Establish systematic innovation processes including: creating dedicated channels where employees can submit and develop ideas; implementing transparent idea management systems; establishing innovation teams supporting employees through the innovation process; providing resources for experimentation and prototyping; creating safe-to-fail environments; celebrating both successful innovations and lessons from failures; and ensuring employees receive recognition for innovative contributions.
6. Regularly measure and monitor self-esteem, work engagement, intrinsic motivation, and innovative behavior through: periodic surveys using validated instruments; analysis by department, team, and demographics to target interventions; tracking trends to evaluate intervention effectiveness; incorporating metrics into performance dashboards and strategic planning; conducting focus groups for deeper qualitative insights; and benchmarking against industry standards to identify improvement opportunities.
7. Invest in leadership development programs that: educate leaders about the importance of self-esteem, engagement, and intrinsic motivation for innovation; train leaders in behaviors building self-esteem such as authentic recognition, constructive feedback, delegating meaningful responsibilities, and expressing confidence in abilities; develop emotional intelligence to better understand psychological needs; teach autonomy-supportive approaches; equip leaders for meaningful conversations about values and career aspirations; and hold leaders accountable through performance evaluations.
8. Design work environments supporting engagement, motivation, and innovation through: creating collaborative spaces facilitating idea sharing and cross-functional interaction; providing quiet spaces for focused work; establishing innovation labs equipped for prototyping; implementing digital platforms enabling dispersed employees to collaborate; displaying innovation successes to inspire others; designing aesthetically pleasing and

comfortable spaces; and ensuring remote workers have equal access to engagement resources and innovation opportunities.

9. Embed innovation into organizational culture through: articulating clear values emphasizing innovation, learning, and continuous improvement; establishing strategic objectives including innovation goals; incorporating innovative behavior in job descriptions, hiring, and promotions; including innovation-related goals in performance objectives; designing reward systems recognizing contributions without undermining intrinsic motivation; allocating budget specifically for innovation initiatives; and ensuring senior leadership consistently models and champions innovative behaviors.
10. Approach these recommendations with contextual awareness by: considering unique organizational culture, industry context, and employee characteristics; piloting interventions before organization-wide rollout; combining quantitative and qualitative data for comprehensive understanding; recognizing that building self-esteem, engagement, and motivation requires sustained effort over time; acknowledging that relationships may operate differently in different cultural contexts; complementing individual-level interventions with team and organizational-level factors; and remaining open to learning, experimentation, and continuous improvement.

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THE RELATIONSHIP BETWEEN EMPLOYEE SELF-ESTEEM, INNOVATIVE BEHAVIOR, WORK ENGAGEMENT AND INTRINSIC MOTIVATION

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Master thesis

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SUMMARY

81 pages, 27 tables, 7 figures, 4 annexes, 132 references.

The main aim of this master's thesis is to investigate the relationship between self-esteem and innovative behavior through the mediating role of work engagement and intrinsic motivation.

The thesis is structured into three principal sections – theoretical literature review, research design and methods, and empirical findings – accompanied by an introduction, concluding remarks with practical recommendations, bibliography, and supplementary materials.

The theoretical section explores the conceptual foundations of self-esteem, work engagement, intrinsic motivation, and innovative workplace behavior. This includes examining self-esteem's theoretical underpinnings and constituent elements, the three dimensions of work engagement (vigor, dedication, and absorption), the Self-Determination Theory framework for understanding intrinsic

motivation, the various dimensions of innovative work behavior, factors that shape employee innovation, and the theoretical connections among these constructs.

Drawing upon the theoretical review, a conceptual model was constructed to guide quantitative empirical investigation into how self-esteem influences innovative behavior through work engagement and intrinsic motivation as mediating variables. Data was collected from 260 employees across various Lithuanian organizations, with all responses utilized in subsequent statistical examination.

Data analysis was performed using IBM SPSS statistical software. The analytical approach incorporated multiple techniques: descriptive measures (central tendency, frequency distributions, variability), internal consistency assessment via Cronbach's alpha reliability coefficients, normality evaluation through Skewness/Kurtosis statistics, one-sample t-tests for examining construct presence, means and one-way ANOVA for exploring demographic and organizational variations, simple linear regression for examining direct associations, and mediation modeling for testing indirect pathways.

Empirical findings confirmed that self-esteem significantly predicts innovative work behavior. Mediation testing revealed that both work engagement and intrinsic motivation function as statistically significant partial mediators between self-esteem and innovative behavior, with work engagement exhibiting greater mediating strength compared to intrinsic motivation.

The final section synthesizes key insights from both theoretical exploration and empirical investigation, offering actionable recommendations for organizational practice.

Keywords: self-esteem, work engagement, intrinsic motivation, innovative work behavior.

DARBUOTOJŲ SAVIVERTĖS, INOVATYVAUS ELGESIO IR ĮSITRAUKIMO Į DARBĄ BEI VIDINĖS MOTYVACIJOS SĄRYŠYS

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SANTRAUKA

81 puslapiai, 27 lentelės, 7 paveikslai, 4 priedų, 132 literatūros šaltiniai.

Pagrindinis šio magistro darbo tikslas – ištirti savigarbos ir inovatyvaus elgesio ryšį per įsitraukimo į darbą ir vidinės motyvacijos tarpininkaujantį vaidmenį.

Disertacija suskirstyta į tris pagrindines dalis – teorinės literatūros apžvalgą, tyrimo dizainą ir metodus bei empirinius rezultatus – kartu su įvadu, baigiamosiomis pastabomis su praktinėmis rekomendacijomis, bibliografija ir papildoma medžiaga.

Teorinėje dalyje nagrinėjami savigarbos, įsitraukimo į darbą, vidinės motyvacijos ir inovatyvaus elgesio darbo vietoje konceptualūs pagrindai. Tai apima savigarbos teorinių pagrindų ir sudedamųjų elementų, trijų įsitraukimo į darbą aspektų (energijos, atsidavimo ir įsisavinimo), savęs apsisprendimo teorijos, skirtos vidinės motyvacijos supratimui, įvairių inovatyvaus elgesio darbe aspektų, darbuotojų inovacijas formuojančių veiksnių ir šių konstrukcijų teorinių ryšių nagrinėjimą.

Remiantis teorine apžvalga, buvo sukurtas konceptualus modelis, skirtas kiekybiniam empiriniam tyrimui, kaip savigarba veikia inovatyvų elgesį per įsitraukimą į darbą ir vidinę motyvaciją kaip

tarpininkaujančius kintamuosius. Duomenys buvo surinkti iš 260 darbuotojų įvairiose Lietuvos organizacijose, o visi atsakymai panaudoti vėlesniame statistiniame tyrime.

Duomenų analizė atlikta naudojant IBM SPSS statistinę programinę įrangą. Analitiniame metode buvo naudojami keli metodai: aprašomieji matavimai (centrinė tendencija, dažnių pasiskirstymas, kintamumas), vidinio suderinamumo vertinimas naudojant Cronbacho alfa patikimumo koeficientus, normalumo vertinimas naudojant asimetrijos / eksceso statistiką, vienos imties t testai konstrukto buvimui tirti, vidurkiai ir vienfaktorinė ANOVA demografiniams ir organizaciniams skirtumams tirti, paprasta tiesinė regresija tiesioginiams ryšiams tirti ir mediacijos modeliavimas netiesioginiams keliams tirti.

Empiriniai duomenys patvirtino, kad savigarba reikšmingai prognozuoja novatorišką elgesį darbe. Mediacijos testai atskleidė, kad tiek įsitraukimas į darbą, tiek vidinė motyvacija veikia kaip statistiškai reikšmingi daliniai tarpininkai tarp savigarbos ir novatoriško elgesio, o įsitraukimas į darbą pasižymi didesne tarpininkavimo jėga, palyginti su vidine motyvacija.

Paskutinėje dalyje apibendrinamos pagrindinės įžvalgos iš teorinio ir empirinio tyrimo, pateikiant praktines rekomendacijas organizacinei praktikai.

Raktiniai žodžiai: savigarba, įsitraukimas į darbą, vidinė motyvacija, novatoriškas elgesys darbe.

ANNEXES

Annex 1. Research Questionnaire

Dear Participant,

You are invited to participate in a research study examining the relationships between self-esteem, work engagement, intrinsic motivation, and innovative behavior in the workplace. This research is being conducted as part of a Master's thesis at Vilnius University, Faculty of Economics and Business Administration.

The purpose of this study is to better understand how personal psychological resources like self-esteem influence employees' innovative behavior, and how work engagement and intrinsic motivation play a role in this relationship.

Your participation in this survey is entirely voluntary. All responses will be kept strictly confidential and will be used solely for research purposes. The survey will take approximately 15-20 minutes to complete. There are no right or wrong answers to any of the questions, so please answer as honestly as possible based on your experiences.

By proceeding with this survey, you consent to participate in this research. You may withdraw from the survey at any time without penalty.

Thank you for your valuable contribution to this research.

Do you consent to participate in this study?

- Yes, I consent to participate
- No, I do not wish to participate

Section A: Demographic and Organizational Information

This section asks for information about you and your organization. This information will be used for statistical purposes only and will not be used to identify individual respondents.

1. Gender:
    - Male
    - Female
    - Non-binary
    - Prefer not to say
2. Age:

- Less than 18 years
- 18-24 years
- 25-34 years
- 35-44 years
- 45-54 years
- 55-64 years
- 65 years or older

3. Highest level of education completed:
    - High school or equivalent
    - Vocational training
    - Bachelor's degree
    - Master's degree
    - Doctoral degree
    - Other (please specify): _____
4. How long have you been working in your current organization?
    - Less than 1 year
    - 1-3 years
    - 4-6 years
    - 7-10 years
    - More than 10 years
5. What is your current job position/level?
    - Managerial
    - Non-managerial
6. Which sector does your organization operate in?
    - Technology/IT
    - Finance/Banking
    - Manufacturing
    - Services
    - Healthcare
    - Education
    - Government/Public sector
    - Non-profit
    - Other (please specify): _____

7. Size of your organization (number of employees):
    - Micro (1-9 employees)
    - Small (10-49 employees)
    - Medium (50-249 employees)
    - Large (250+ employees)

Section B: Self-Esteem

The following statements concern your general feelings about yourself. Please indicate how strongly you agree or disagree with each statement by selecting the appropriate option.

Scale: 1 = Strongly disagree, 2 = Disagree, 3 = Agree, 4 = Strongly agree

1. On the whole, I am satisfied with myself.
    - 1 - Strongly disagree
    - 2 - Disagree
    - 3 - Agree
    - 4 - Strongly agree
2. At times I think I am no good at all.
    - 1 - Strongly disagree
    - 2 - Disagree
    - 3 - Agree
    - 4 - Strongly agree
3. I feel that I have a number of good qualities.
    - 1 - Strongly disagree
    - 2 - Disagree
    - 3 - Agree
    - 4 - Strongly agree
4. I am able to do things as well as most other people.
    - 1 - Strongly disagree
    - 2 - Disagree
    - 3 - Agree
    - 4 - Strongly agree
5. I feel I do not have much to be proud of.
    - 1 - Strongly disagree
    - 2 - Disagree
    - 3 - Agree

- 4 - Strongly agree

6. I certainly feel useless at times.
    - 1 - Strongly disagree
    - 2 - Disagree
    - 3 - Agree
    - 4 - Strongly agree
7. I feel that I'm a person of worth, at least on an equal plane with others.
    - 1 - Strongly disagree
    - 2 - Disagree
    - 3 - Agree
    - 4 - Strongly agree
8. I wish I could have more respect for myself.
    - 1 - Strongly disagree
    - 2 - Disagree
    - 3 - Agree
    - 4 - Strongly agree
9. All in all, I am inclined to feel that I am a failure.
    - 1 - Strongly disagree
    - 2 - Disagree
    - 3 - Agree
    - 4 - Strongly agree
10. I take a positive attitude toward myself.
    - 1 - Strongly disagree
    - 2 - Disagree
    - 3 - Agree
    - 4 - Strongly agree

Section C: Work Engagement

The following statements are about how you feel at work. Please read each statement carefully and decide if you ever feel this way about your job. If you have never had this feeling, select "0" (Never). If you have had this feeling, indicate how often you feel it by selecting a number from 1 to 6 that best describes how frequently you feel that way.

Scale: 0 = Never, 1 = Almost never (A few times a year or less), 2 = Rarely (Once a month or less), 3 = Sometimes (A few times a month), 4 = Often (Once a week), 5 = Very often (A few times a week), 6 = Always (Every day)

1. At my work, I feel bursting with energy.
    - 0 - Never
    - 1 - Almost never (A few times a year or less)
    - 2 - Rarely (Once a month or less)
    - 3 - Sometimes (A few times a month)
    - 4 - Often (Once a week)
    - 5 - Very often (A few times a week)
    - 6 - Always (Every day)
2. At my job, I feel strong and vigorous.
    - 0 - Never
    - 1 - Almost never (A few times a year or less)
    - 2 - Rarely (Once a month or less)
    - 3 - Sometimes (A few times a month)
    - 4 - Often (Once a week)
    - 5 - Very often (A few times a week)
    - 6 - Always (Every day)
3. When I get up in the morning, I feel like going to work.
    - 0 - Never
    - 1 - Almost never (A few times a year or less)
    - 2 - Rarely (Once a month or less)
    - 3 - Sometimes (A few times a month)
    - 4 - Often (Once a week)
    - 5 - Very often (A few times a week)
    - 6 - Always (Every day)
4. I am enthusiastic about my job.
    - 0 - Never
    - 1 - Almost never (A few times a year or less)
    - 2 - Rarely (Once a month or less)
    - 3 - Sometimes (A few times a month)
    - 4 - Often (Once a week)

- 5 - Very often (A few times a week)
- 6 - Always (Every day)

5. My job inspires me.
    - 0 - Never
    - 1 - Almost never (A few times a year or less)
    - 2 - Rarely (Once a month or less)
    - 3 - Sometimes (A few times a month)
    - 4 - Often (Once a week)
    - 5 - Very often (A few times a week)
    - 6 - Always (Every day)
6. I am proud of the work that I do.
    - 0 - Never
    - 1 - Almost never (A few times a year or less)
    - 2 - Rarely (Once a month or less)
    - 3 - Sometimes (A few times a month)
    - 4 - Often (Once a week)
    - 5 - Very often (A few times a week)
    - 6 - Always (Every day)
7. I feel happy when I am working intensely.
    - 0 - Never
    - 1 - Almost never (A few times a year or less)
    - 2 - Rarely (Once a month or less)
    - 3 - Sometimes (A few times a month)
    - 4 - Often (Once a week)
    - 5 - Very often (A few times a week)
    - 6 - Always (Every day)
8. I am immersed in my work.
    - 0 - Never
    - 1 - Almost never (A few times a year or less)
    - 2 - Rarely (Once a month or less)
    - 3 - Sometimes (A few times a month)
    - 4 - Often (Once a week)
    - 5 - Very often (A few times a week)

- 6 - Always (Every day)

9. I get carried away when I am working.
    - 0 - Never
    - 1 - Almost never (A few times a year or less)
    - 2 - Rarely (Once a month or less)
    - 3 - Sometimes (A few times a month)
    - 4 - Often (Once a week)
    - 5 - Very often (A few times a week)
    - 6 - Always (Every day)

Section D: Intrinsic Motivation

The following statements relate to the reasons why you put efforts into your current job. Using the scale below, please indicate to what extent each of the following statements corresponds to your reasons for engaging in your work.

Scale: 1 = Does not correspond at all, 2 = Corresponds very little, 3 = Corresponds a little, 4 = Corresponds moderately, 5 = Corresponds strongly, 6 = Corresponds very strongly, 7 = Corresponds exactly

1. Because this is the type of work I chose to do to attain a certain lifestyle.
    - 1 - Does not correspond at all
    - 2 - Corresponds very little
    - 3 - Corresponds a little
    - 4 - Corresponds moderately
    - 5 - Corresponds strongly
    - 6 - Corresponds very strongly
    - 7 - Corresponds exactly
2. For the income it provides me.
    - 1 - Does not correspond at all
    - 2 - Corresponds very little
    - 3 - Corresponds a little
    - 4 - Corresponds moderately
    - 5 - Corresponds strongly
    - 6 - Corresponds very strongly
    - 7 - Corresponds exactly

3. I ask myself this question, I don't seem to be able to manage the important tasks related to this work.
    - 1 - Does not correspond at all
    - 2 - Corresponds very little
    - 3 - Corresponds a little
    - 4 - Corresponds moderately
    - 5 - Corresponds strongly
    - 6 - Corresponds very strongly
    - 7 - Corresponds exactly
4. Because I derive much pleasure from learning new things.
    - 1 - Does not correspond at all
    - 2 - Corresponds very little
    - 3 - Corresponds a little
    - 4 - Corresponds moderately
    - 5 - Corresponds strongly
    - 6 - Corresponds very strongly
    - 7 - Corresponds exactly
5. Because it has become a fundamental part of who I am.
    - 1 - Does not correspond at all
    - 2 - Corresponds very little
    - 3 - Corresponds a little
    - 4 - Corresponds moderately
    - 5 - Corresponds strongly
    - 6 - Corresponds very strongly
    - 7 - Corresponds exactly
6. Because I want to succeed at this job, if not I would be very ashamed of myself.
    - 1 - Does not correspond at all
    - 2 - Corresponds very little
    - 3 - Corresponds a little
    - 4 - Corresponds moderately
    - 5 - Corresponds strongly
    - 6 - Corresponds very strongly
    - 7 - Corresponds exactly

7. Because I chose this type of work to attain my career goals.
    - 1 - Does not correspond at all
    - 2 - Corresponds very little
    - 3 - Corresponds a little
    - 4 - Corresponds moderately
    - 5 - Corresponds strongly
    - 6 - Corresponds very strongly
    - 7 - Corresponds exactly
8. For the satisfaction I experience from taking on interesting challenges.
    - 1 - Does not correspond at all
    - 2 - Corresponds very little
    - 3 - Corresponds a little
    - 4 - Corresponds moderately
    - 5 - Corresponds strongly
    - 6 - Corresponds very strongly
    - 7 - Corresponds exactly
9. Because it allows me to earn money.
    - 1 - Does not correspond at all
    - 2 - Corresponds very little
    - 3 - Corresponds a little
    - 4 - Corresponds moderately
    - 5 - Corresponds strongly
    - 6 - Corresponds very strongly
    - 7 - Corresponds exactly
10. Because it is part of the way in which I have chosen to live my life.
    - 1 - Does not correspond at all
    - 2 - Corresponds very little
    - 3 - Corresponds a little
    - 4 - Corresponds moderately
    - 5 - Corresponds strongly
    - 6 - Corresponds very strongly
    - 7 - Corresponds exactly
11. Because I want to be very good at this work, otherwise, I would be very disappointed.

- 1 - Does not correspond at all
- 2 - Corresponds very little
- 3 - Corresponds a little
- 4 - Corresponds moderately
- 5 - Corresponds strongly
- 6 - Corresponds very strongly
- 7 - Corresponds exactly

12. I don't know why, we are provided with unrealistic working conditions.
    - 1 - Does not correspond at all
    - 2 - Corresponds very little
    - 3 - Corresponds a little
    - 4 - Corresponds moderately
    - 5 - Corresponds strongly
    - 6 - Corresponds very strongly
    - 7 - Corresponds exactly
13. Because I want to be a "winner" in life.
    - 1 - Does not correspond at all
    - 2 - Corresponds very little
    - 3 - Corresponds a little
    - 4 - Corresponds moderately
    - 5 - Corresponds strongly
    - 6 - Corresponds very strongly
    - 7 - Corresponds exactly
14. Because it is the type of work I have chosen to attain certain important objectives.
    - 1 - Does not correspond at all
    - 2 - Corresponds very little
    - 3 - Corresponds a little
    - 4 - Corresponds moderately
    - 5 - Corresponds strongly
    - 6 - Corresponds very strongly
    - 7 - Corresponds exactly
15. For the satisfaction I experience when I am successful at difficult tasks.
    - 1 - Does not correspond at all

- 2 - Corresponds very little
- 3 - Corresponds a little
- 4 - Corresponds moderately
- 5 - Corresponds strongly
- 6 - Corresponds very strongly
- 7 - Corresponds exactly

16. Because this type of work provides me with security.
    - 1 - Does not correspond at all
    - 2 - Corresponds very little
    - 3 - Corresponds a little
    - 4 - Corresponds moderately
    - 5 - Corresponds strongly
    - 6 - Corresponds very strongly
    - 7 - Corresponds exactly
17. I don't know, too much is expected of us.
    - 1 - Does not correspond at all
    - 2 - Corresponds very little
    - 3 - Corresponds a little
    - 4 - Corresponds moderately
    - 5 - Corresponds strongly
    - 6 - Corresponds very strongly
    - 7 - Corresponds exactly
18. Because this job is a part of my life.
    - 1 - Does not correspond at all
    - 2 - Corresponds very little
    - 3 - Corresponds a little
    - 4 - Corresponds moderately
    - 5 - Corresponds strongly
    - 6 - Corresponds very strongly
    - 7 - Corresponds exactly

Section E: Innovative Behavior

The following statements describe different behaviors related to innovation in the workplace. Using the scale below, please indicate how often you engage in each of these behaviors in your current job.

Scale: 1 = Never, 2 = Very rarely, 3 = Rarely, 4 = Sometimes, 5 = Often, 6 = Always

How often do you...

1. Look for opportunities to improve an existing process, technology, product, service, or work relationship?
    - 1 - Never
    - 2 - Very rarely
    - 3 - Rarely
    - 4 - Sometimes
    - 5 - Often
    - 6 - Always
2. Recognize opportunities to make a positive difference in your work, department, organization, or with customers?
    - 1 - Never
    - 2 - Very rarely
    - 3 - Rarely
    - 4 - Sometimes
    - 5 - Often
    - 6 - Always
3. Pay attention to non-routine issues in your work, department, organization, or the marketplace?
    - 1 - Never
    - 2 - Very rarely
    - 3 - Rarely
    - 4 - Sometimes
    - 5 - Often
    - 6 - Always
4. Generate ideas or solutions to address problems?
    - 1 - Never
    - 2 - Very rarely
    - 3 - Rarely
    - 4 - Sometimes
    - 5 - Often
    - 6 - Always

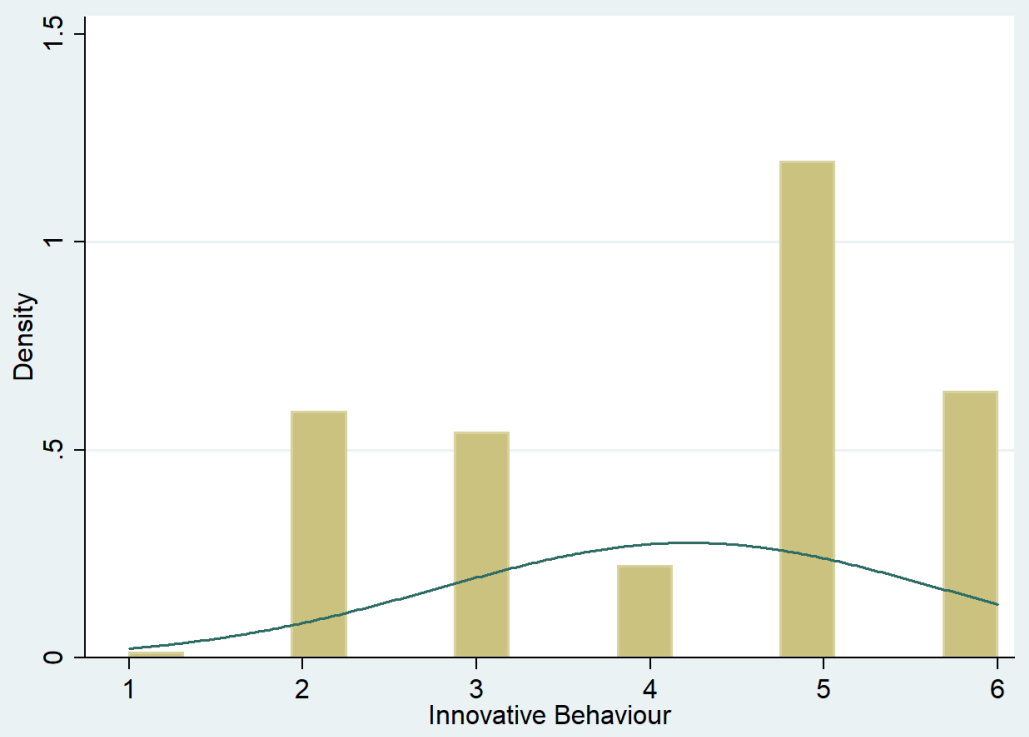
5. Define problems more broadly in order to gain greater insight into them?
    - 1 - Never
    - 2 - Very rarely
    - 3 - Rarely
    - 4 - Sometimes
    - 5 - Often
    - 6 - Always
6. Experiment with new ideas and solutions?
    - 1 - Never
    - 2 - Very rarely
    - 3 - Rarely
    - 4 - Sometimes
    - 5 - Often
    - 6 - Always
7. Test out ideas or solutions to address unmet needs?
    - 1 - Never
    - 2 - Very rarely
    - 3 - Rarely
    - 4 - Sometimes
    - 5 - Often
    - 6 - Always
8. Evaluate the strengths and weaknesses of new ideas?
    - 1 - Never
    - 2 - Very rarely
    - 3 - Rarely
    - 4 - Sometimes
    - 5 - Often
    - 6 - Always
9. Try to persuade others of the importance of a new idea or solution?
    - 1 - Never
    - 2 - Very rarely
    - 3 - Rarely
    - 4 - Sometimes

- 5 - Often
- 6 - Always

10. Push ideas forward so that they have a chance to become implemented?
    - 1 - Never
    - 2 - Very rarely
    - 3 - Rarely
    - 4 - Sometimes
    - 5 - Often
    - 6 - Always
11. Take the risk to support new ideas?
    - 1 - Never
    - 2 - Very rarely
    - 3 - Rarely
    - 4 - Sometimes
    - 5 - Often
    - 6 - Always
12. Implement changes that seem to be beneficial?
    - 1 - Never
    - 2 - Very rarely
    - 3 - Rarely
    - 4 - Sometimes
    - 5 - Often
    - 6 - Always
13. Work the bugs out of new approaches when applying them to an existing process, technology, product, or service?
    - 1 - Never
    - 2 - Very rarely
    - 3 - Rarely
    - 4 - Sometimes
    - 5 - Often
    - 6 - Always
14. Incorporate new ideas for improving an existing process, technology, product, or service into daily routines?

- 1 - Never
- 2 - Very rarely
- 3 - Rarely
- 4 - Sometimes
- 5 - Often
- 6 - Always

Annex 2. Histograms of the variables of Study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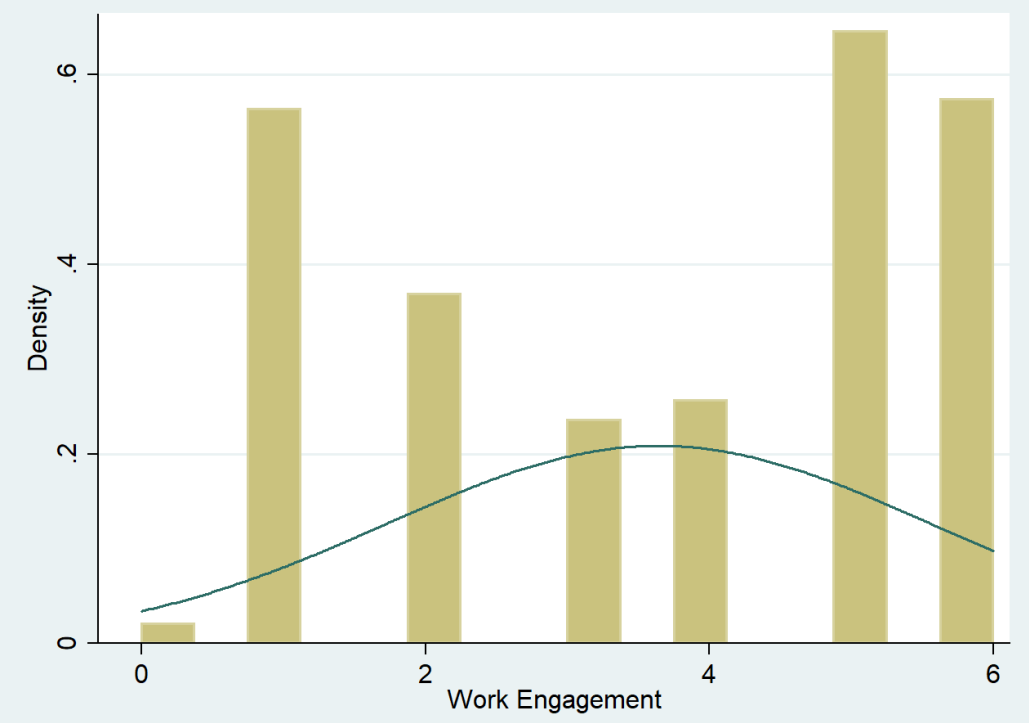
Innovative Behaviour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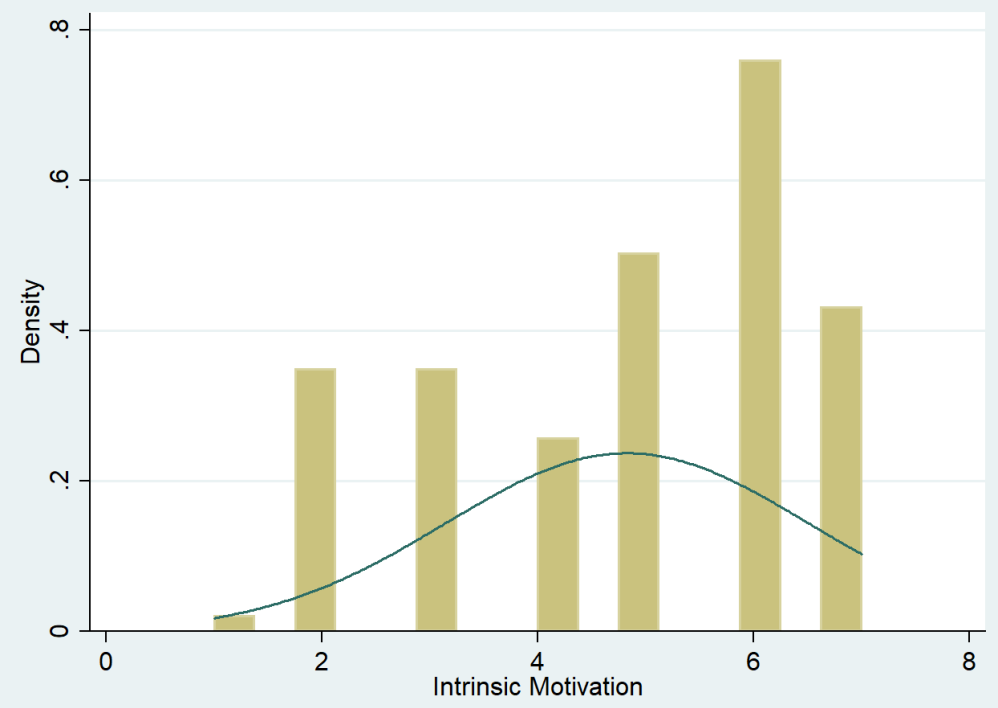
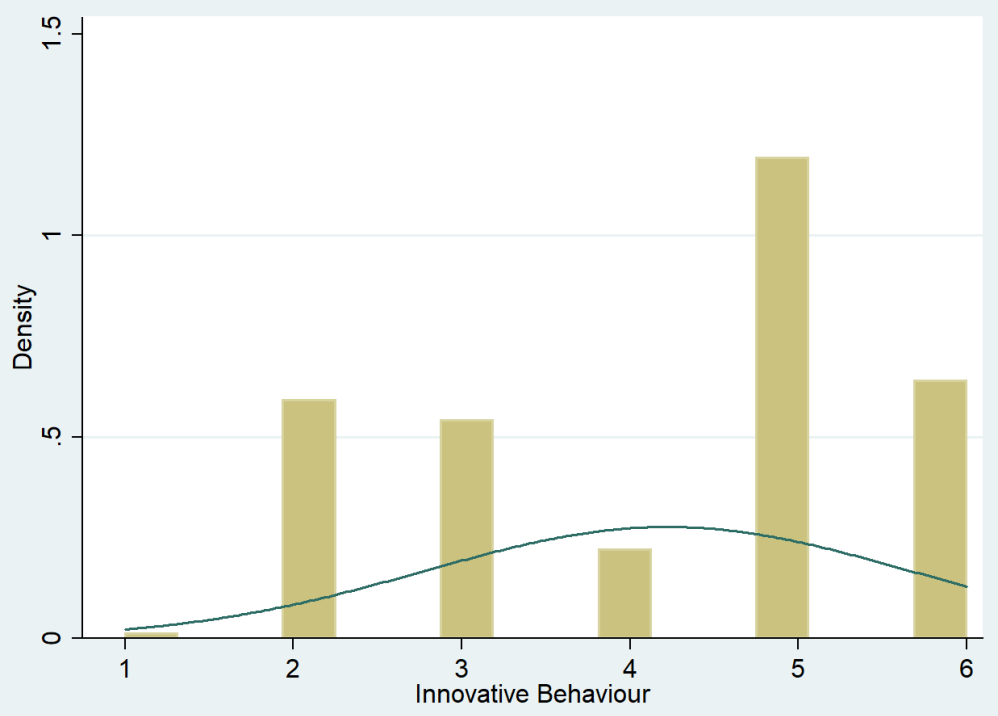
Work Engagement





Annex 2. One Sample T-test Statistics variables of Study

Self-Esteem

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
On the whole, I am satisfied with myself.	260	3.07	.883	.055
At times I think I am no good at all.	260	2.83	.943	.059
I feel that I have a number of good qualities.	260	3.15	.779	.048
I am able to do things as well as most other people.	260	3.20	.746	.046
I feel I do not have much to be proud of.	260	2.63	.948	.059
I certainly feel useless at times.	260	2.58	1.019	.063
I feel that I'm a person of worth, at least on an equal plane with others.	260	3.02	.856	.053
I wish I could have more respect for myself.	260	2.88	.976	.061
All in all, I am inclined to feel that I am a failure.	260	2.56	1.105	.069
I take a positive attitude toward myself.	260	3.23	.837	.052

One-Sample Test

	Test Value = 0					
					95% Confidence Interval of the Difference	
	t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
On the whole, I am satisfied with myself.	55.984	259	.000	3.065	2.96	3.17
At times I think I am no good at all.	48.379	259	.000	2.831	2.72	2.95
I feel that I have a number of good qualities.	65.206	259	.000	3.150	3.05	3.25
I am able to do things as well as most other people.	69.236	259	.000	3.204	3.11	3.29

I feel I do not have much to be proud of.	44.767	259	.000	2.631	2.52	2.75
I certainly feel useless at times.	40.883	259	.000	2.585	2.46	2.71
I feel that I'm a person of worth, at least on an equal plane with others.	56.777	259	.000	3.015	2.91	3.12
I wish I could have more respect for myself.	47.674	259	.000	2.885	2.77	3.00
All in all, I am inclined to feel that I am a failure.	37.329	259	.000	2.558	2.42	2.69
I take a positive attitude toward myself.	62.137	259	.000	3.227	3.12	3.33

Work Engagement

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
At my work, I feel bursting with energy.	260	3.64	1.913	.119
At my job, I feel strong and vigorous.	260	3.88	1.598	.099
When I get up in the morning, I feel like going to work.	260	3.90	1.615	.100
I am enthusiastic about my job.	260	4.09	1.585	.098
My job inspires me.	260	4.26	1.470	.091
I am proud of the work that I do.	260	4.48	1.511	.094
I feel happy when I am working intensely.	260	4.02	1.591	.099
I am immersed in my work.	260	4.15	1.603	.099
I get carried away when I am working.	260	3.97	1.766	.110

One-Sample Test

	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference Lower	Upper

At my work, I feel bursting with energy.	30.702	259	.000	3.642	3.41	3.88
At my job, I feel strong and vigorous.	39.161	259	.000	3.881	3.69	4.08
When I get up in the morning, I feel like going to work.	38.942	259	.000	3.900	3.70	4.10
I am enthusiastic about my job.	41.583	259	.000	4.088	3.89	4.28
My job inspires me.	46.700	259	.000	4.258	4.08	4.44
I am proud of the work that I do.	47.873	259	.000	4.485	4.30	4.67
I feel happy when I am working intensely.	40.685	259	.000	4.015	3.82	4.21
I am immersed in my work.	41.757	259	.000	4.150	3.95	4.35
I get carried away when I am working.	36.241	259	.000	3.969	3.75	4.18

Intrinsic Motivation

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Because this is the type of work I chose to do to attain a certain lifestyle.	260	4.96	1.465	.091
For the income it provides me.	260	5.02	1.644	.102
I ask myself this question, I don't seem to be able to manage the important tasks related to this work.	260	4.96	1.465	.091
Because I derive much pleasure from learning new things.	260	4.83	1.683	.104
Because it has become a fundamental part of who I am.	260	5.02	1.644	.102
Because I want to succeed at this job, if not I would be very ashamed of myself.	260	4.83	1.683	.104
Because I chose this type of work to attain my career goals.	260	4.96	1.465	.091
For the satisfaction I experience from taking on interesting challenges.	260	4.96	1.465	.091

Because it allows me to earn money.	260	4.96	1.465	.091
Because it is part of the way in which I have chosen to live my life.	260	4.83	1.683	.104
Because I want to be very good at this work, otherwise, I would be very disappointed.	260	5.02	1.644	.102
I don't know why, we are provided with unrealistic working conditions.	260	4.96	1.465	.091
Because I want to be a "winner" in life.	260	5.02	1.644	.102
Because it is the type of work I have chosen to attain certain important objectives.	260	4.83	1.683	.104
For the satisfaction I experience when I am successful at difficult tasks.	260	5.02	1.644	.102
Because this type of work provides me with security.	260	4.96	1.465	.091
I don't know, too much is expected of us.	260	5.02	1.644	.102
Because this job is a part of my life.	260	4.83	1.683	.104

One-Sample Test

	Test Value = 0					
					95% Confidence Interval of the Difference	
	t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
Because this is the type of work I chose to do to attain a certain lifestyle.	54.622	259	.000	4.962	4.78	5.14
For the income it provides me.	49.194	259	.000	5.015	4.81	5.22
I ask myself this question, I don't seem to be able to manage the important tasks related to this work.	54.622	259	.000	4.962	4.78	5.14
Because I derive much pleasure from learning new things.	46.259	259	.000	4.827	4.62	5.03
Because it has become a fundamental part of who I am.	49.194	259	.000	5.015	4.81	5.22

Because I want to succeed at this job, if not I would be very ashamed of myself.	46.259	259	.000	4.827	4.62	5.03
Because I chose this type of work to attain my career goals.	54.622	259	.000	4.962	4.78	5.14
For the satisfaction I experience from taking on interesting challenges.	54.622	259	.000	4.962	4.78	5.14
Because it allows me to earn money.	54.622	259	.000	4.962	4.78	5.14
Because it is part of the way in which I have chosen to live my life.	46.259	259	.000	4.827	4.62	5.03
Because I want to be very good at this work, otherwise, I would be very disappointed.	49.194	259	.000	5.015	4.81	5.22
I don't know why, we are provided with unrealistic working conditions.	54.622	259	.000	4.962	4.78	5.14
Because I want to be a "winner" in life.	49.194	259	.000	5.015	4.81	5.22
Because it is the type of work I have chosen to attain certain important objectives.	46.259	259	.000	4.827	4.62	5.03
For the satisfaction I experience when I am successful at difficult tasks.	49.194	259	.000	5.015	4.81	5.22
Because this type of work provides me with security.	54.622	259	.000	4.962	4.78	5.14
I don't know, too much is expected of us.	49.194	259	.000	5.015	4.81	5.22
Because this job is a part of my life.	46.259	259	.000	4.827	4.62	5.03

Innovative Behaviour

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Look for opportunities to improve an existing process, technology, product, service, or work relationship?	260	4.22	1.440	.089
Recognize opportunities to make a positive difference in your work, department, organization, or with customers?	260	4.47	1.203	.075
Pay attention to non-routine issues in your work, department, organization, or the marketplace?	260	4.48	1.337	.083
Generate ideas or solutions to address problems?	260	4.43	1.323	.082
Define problems more broadly in order to gain greater insight into them?	260	4.32	1.382	.086
Experiment with new ideas and solutions?	260	4.39	1.387	.086
Test out ideas or solutions to address unmet needs?	260	4.42	1.369	.085
Evaluate the strengths and weaknesses of new ideas?	260	4.38	1.377	.085
Try to persuade others of the importance of a new idea or solution?	260	4.20	1.414	.088
Push ideas forward so that they have a chance to become implemented?	260	4.41	1.368	.085
Take the risk to support new ideas?	260	4.50	1.311	.081
Implement changes that seem to be beneficial?	260	4.40	1.387	.086
Work the bugs out of new approaches when applying them to an existing process, technology, product, or service?	260	4.29	1.391	.086
Incorporate new ideas for improving an existing process, technology, product, or service into daily routines?	260	4.36	1.400	.087

One-Sample Test

	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Look for opportunities to improve an existing process, technology, product, service, or work relationship?	47.288	259	.000	4.223	4.05	4.40
Recognize opportunities to make a positive difference in your work, department, organization, or with customers?	59.863	259	.000	4.465	4.32	4.61
Pay attention to non-routine issues in your work, department, organization, or the marketplace?	54.044	259	.000	4.481	4.32	4.64
Generate ideas or solutions to address problems?	53.938	259	.000	4.427	4.27	4.59
Define problems more broadly in order to gain greater insight into them?	50.430	259	.000	4.323	4.15	4.49
Experiment with new ideas and solutions?	51.077	259	.000	4.392	4.22	4.56
Test out ideas or solutions to address unmet needs?	52.020	259	.000	4.415	4.25	4.58
Evaluate the strengths and weaknesses of new ideas?	51.288	259	.000	4.381	4.21	4.55
Try to persuade others of the importance of a new idea or solution?	47.906	259	.000	4.200	4.03	4.37
Push ideas forward so that they have a chance to become implemented?	51.949	259	.000	4.408	4.24	4.57
Take the risk to support new ideas?	55.404	259	.000	4.504	4.34	4.66
Implement changes that seem to be beneficial?	51.145	259	.000	4.400	4.23	4.57
Work the bugs out of new approaches when applying them to an existing process, technology, product, or service?	49.701	259	.000	4.288	4.12	4.46

Incorporate new ideas for improving an existing process, technology, product, or service into daily routines?	50.185	259	.000	4.358	4.19	4.53

Annex 4. Means and One-way ANOVA

Gender

Gender	Self-Esteem	Work Engagement	Intrinsic Motivation	Innovative Behavior
Female	Mean: 3.12, N: 139, SD: .905	Mean: 3.54, N: 139, SD: 1.972	Mean: 4.87, N: 139, SD: 1.756	Mean: 4.02, N: 139, SD: 1.544

Male	Mean: 2.97, N: 115, SD: .863	Mean: 3.67, N: 115, SD: 1.844	Mean: 4.69, N: 115, SD: 1.586	Mean: 4.43, N: 115, SD: 1.305
Non-binary	Mean: 4.00, N: 3, SD: .000	Mean: 6.00, N: 3, SD: .000	Mean: 7.00, N: 3, SD: .000	Mean: 5.00, N: 3, SD: .000
Prefer not to say	Mean: 3.00, N: 3, SD: .000	Mean: 5.00, N: 3, SD: .000	Mean: 6.00, N: 3, SD: .000	Mean: 5.00, N: 3, SD: .000
Total	Mean: 3.07, N: 260, SD: .883	Mean: 3.64, N: 260, SD: 1.913	Mean: 4.83, N: 260, SD: 1.683	Mean: 4.22, N: 260, SD: 1.440

ANOVA Table - Gender

Variable	Source	Sum of Squares	df	Mean Square	F	Sig.
Self-Esteem * Gender	Between Groups	4.046	3	1.349	1.745	.158
	Within Groups	197.843	256	.773		
	Total	201.888	259			
Work Engagement * Gender	Between Groups	23.759	3	7.920	2.194	.089
	Within Groups	923.976	256	3.609		
	Total	947.735	259			
Intrinsic Motivation * Gender	Between Groups	20.812	3	6.937	2.493	.061
	Within Groups	712.399	256	2.783		
	Total	733.212	259			
Innovative Behavior * Gender	Between Groups	14.005	3	4.668	2.285	.079
	Within Groups	523.057	256	2.043		
	Total	537.062	259			

Measures of Association - Gender

Variable	Eta	Eta Squared
Self-Esteem * Gender	.142	.020
Work Engagement * Gender	.158	.025
Intrinsic Motivation * Gender	.168	.028
Innovative Behavior * Gender	.161	.026

Age

Age	Self-Esteem	Work Engagement	Intrinsic Motivation	Innovative Behavior
18-24 years	Mean: 3.42, N: 90, SD: .834	Mean: 4.73, N: 90, SD: 1.599	Mean: 5.66, N: 90, SD: 1.317	Mean: 4.97, N: 90, SD: 1.116
25-34 years	Mean: 2.86, N: 71, SD: .946	Mean: 3.24, N: 71, SD: 1.901	Mean: 4.49, N: 71, SD: 1.681	Mean: 3.96, N: 71, SD: 1.409
35-44 years	Mean: 2.95, N: 66, SD: .732	Mean: 3.05, N: 66, SD: 1.749	Mean: 4.39, N: 66, SD: 1.681	Mean: 3.88, N: 66, SD: 1.514
45-54 years	Mean: 2.74, N: 19, SD: .933	Mean: 2.58, N: 19, SD: 1.774	Mean: 4.21, N: 19, SD: 1.813	Mean: 3.63, N: 19, SD: 1.499
55-64 years	Mean: 2.79, N: 14, SD: .802	Mean: 2.93, N: 14, SD: 1.774	Mean: 4.07, N: 14, SD: 1.774	Mean: 3.21, N: 14, SD: 1.051

Total	Mean: 3.07, N: 260, SD: .883	Mean: 3.64, N: 260, SD: 1.913	Mean: 4.83, N: 260, SD: 1.683	Mean: 4.22, N: 260, SD: 1.440

ANOVA Table - Age

Variable	Source	Sum of Squares	df	Mean Square	F	Sig.
Self-Esteem * Age	Between Groups	18.436	4	4.609	6.407	.000
	Within Groups	183.452	255	.719		
	Total	201.888	259			
Work Engagement * Age	Between Groups	170.781	4	42.695	14.013	.000
	Within Groups	776.953	255	3.047		
	Total	947.735	259			
Intrinsic Motivation * Age	Between Groups	97.299	4	24.325	9.754	.000
	Within Groups	635.913	255	2.494		
	Total	733.212	259			
Innovative Behavior * Age	Between Groups	83.480	4	20.870	11.733	.000
	Within Groups	453.582	255	1.779		
	Total	537.062	259			

Measures of Association - Age

Variable	Eta	Eta Squared
Self-Esteem * Age	.302	.091
Work Engagement * Age	.424	.180
Intrinsic Motivation * Age	.364	.133
Innovative Behavior * Age	.394	.155

Highest Level of Education Completed

Education Level	Self-Esteem	Work Engagement	Intrinsic Motivation	Innovative Behavior
Bachelor's degree	Mean: 3.19, N: 171, SD: .849	Mean: 3.96, N: 171, SD: 1.974	Mean: 5.08, N: 171, SD: 1.570	Mean: 4.43, N: 171, SD: 1.422
Doctoral degree	Mean: 3.00, N: 6, SD: .000	Mean: 4.00, N: 6, SD: 1.095	Mean: 3.50, N: 6, SD: 1.643	Mean: 3.50, N: 6, SD: 1.643
High school or equivalent	Mean: 2.78, N: 18, SD: .943	Mean: 2.61, N: 18, SD: 1.650	Mean: 4.83, N: 18, SD: 1.654	Mean: 3.44, N: 18, SD: 1.653
Master's degree	Mean: 3.00, N: 39, SD: .973	Mean: 3.18, N: 39, SD: 1.636	Mean: 4.36, N: 39, SD: 1.799	Mean: 4.10, N: 39, SD: 1.071
Research on O	Mean: 4.00, N: 1, SD: .	Mean: 6.00, N: 1, SD: .	Mean: 7.00, N: 1, SD: .	Mean: 6.00, N: 1, SD: .
Vocational training	Mean: 2.48, N: 25, SD: .770	Mean: 2.76, N: 25, SD: 1.589	Mean: 4.04, N: 25, SD: 1.837	Mean: 3.68, N: 25, SD: 1.547
Total	Mean: 3.07, N: 260, SD: .883	Mean: 3.64, N: 260, SD: 1.913	Mean: 4.83, N: 260, SD: 1.683	Mean: 4.22, N: 260, SD: 1.440

ANOVA Table - Education

Variable	Source	Sum of Squares	df	Mean Square	F	Sig.
Self-Esteem * Education	Between Groups	13.906	5	2.781	3.758	.003
	Within Groups	187.983	254	.740		
	Total	201.888	259			
Work Engagement * Education	Between Groups	70.440	5	14.088	4.079	.001
	Within Groups	877.295	254	3.454		
	Total	947.735	259			
Intrinsic Motivation * Education	Between Groups	50.423	5	10.085	3.752	.003
	Within Groups	682.788	254	2.688		
	Total	733.212	259			
Innovative Behavior * Education	Between Groups	32.251	5	6.450	3.245	.007
	Within Groups	504.810	254	1.987		
	Total	537.062	259			

Measures of Association - Education

Variable	Eta	Eta Squared
Self-Esteem * Education	.262	.069
Work Engagement * Education	.273	.074
Intrinsic Motivation * Education	.262	.069
Innovative Behavior * Education	.245	.060

How Long Have You Been Working in Your Current Organization?

Tenure	Self-Esteem	Work Engagement	Intrinsic Motivation	Innovative Behavior
1-3 years	Mean: 3.37, N: 101, SD: .784	Mean: 4.58, N: 101, SD: 1.589	Mean: 5.40, N: 101, SD: 1.357	Mean: 4.90, N: 101, SD: 1.204
4-6 years	Mean: 2.89, N: 93, SD: .827	Mean: 2.89, N: 93, SD: 1.959	Mean: 4.58, N: 93, SD: 1.484	Mean: 3.73, N: 93, SD: 1.461
7-10 years	Mean: 2.63, N: 27, SD: .688	Mean: 2.30, N: 27, SD: 1.540	Mean: 3.07, N: 27, SD: 1.567	Mean: 3.15, N: 27, SD: 1.027
Less than 1 year	Mean: 2.73, N: 26, SD: 1.251	Mean: 3.54, N: 26, SD: 1.503	Mean: 4.96, N: 26, SD: 2.010	Mean: 4.31, N: 26, SD: 1.225
More than 10 years	Mean: 3.54, N: 13, SD: .519	Mean: 4.69, N: 13, SD: 1.251	Mean: 5.54, N: 13, SD: 2.106	Mean: 4.54, N: 13, SD: 1.561
Total	Mean: 3.07, N: 260, SD: .883	Mean: 3.64, N: 260, SD: 1.913	Mean: 4.83, N: 260, SD: 1.683	Mean: 4.22, N: 260, SD: 1.440

ANOVA Table - Tenure

Variable	Source	Sum of Squares	df	Mean Square	F	Sig.

Self-Esteem * Tenure	Between Groups	22.876	4	5.719	8.147	.000
	Within Groups	179.013	255	.702		
	Total	201.888	259			
Work Engagement * Tenure	Between Groups	205.415	4	51.354	17.641	.000
	Within Groups	742.320	255	2.911		
	Total	947.735	259			
Intrinsic Motivation * Tenure	Between Groups	128.364	4	32.091	13.529	.000
	Within Groups	604.848	255	2.372		
	Total	733.212	259			
Innovative Behavior * Tenure	Between Groups	101.595	4	25.399	14.873	.000
	Within Groups	435.466	255	1.708		
	Total	537.062	259			

Measures of Association - Tenure

Variable	Eta	Eta Squared
Self-Esteem * Tenure	.337	.113
Work Engagement * Tenure	.466	.217
Intrinsic Motivation * Tenure	.418	.175
Innovative Behavior * Tenure	.435	.189

What is Your Current Job Position/Level?

Position Level	Self-Esteem	Work Engagement	Intrinsic Motivation	Innovative Behavior
Managerial	Mean: 2.90, N: 127, SD: .853	Mean: 3.05, N: 127, SD: 1.881	Mean: 4.37, N: 127, SD: 1.717	Mean: 3.83, N: 127, SD: 1.511
Non-managerial	Mean: 3.23, N: 133, SD: .884	Mean: 4.21, N: 133, SD: 1.771	Mean: 5.26, N: 133, SD: 1.532	Mean: 4.59, N: 133, SD: 1.268
Total	Mean: 3.07, N: 260, SD: .883	Mean: 3.64, N: 260, SD: 1.913	Mean: 4.83, N: 260, SD: 1.683	Mean: 4.22, N: 260, SD: 1.440

ANOVA Table - Position

Variable	Source	Sum of Squares	df	Mean Square	F	Sig.
Self-Esteem * Position	Between Groups	6.986	1	6.986	9.248	.003
	Within Groups	194.902	258	.755		
	Total	201.888	259			
Work Engagement * Position	Between Groups	87.913	1	87.913	26.379	.000
	Within Groups	859.822	258	3.333		
	Total	947.735	259			
Intrinsic Motivation * Position	Between Groups	51.816	1	51.816	19.619	.000
	Within Groups	681.396	258	2.641		
	Total	733.212	259			

Innovative Behavior * Position	Between Groups	37.459	1	37.459	19.344	.000
	Within Groups	499.603	258	1.936		
	Total	537.062	259			

Measures of Association - Position

Variable	Eta	Eta Squared
Self-Esteem * Position	.186	.035
Work Engagement * Position	.305	.093
Intrinsic Motivation * Position	.266	.071
Innovative Behavior * Position	.264	.070

Which Sector Does Your Organization Operate In?

Sector	Self-Esteem	Work Engagement	Intrinsic Motivation	Innovative Behavior
Cook	Mean: 1.00, N: 2, SD: .000	Mean: 3.00, N: 2, SD: .000	Mean: 1.00, N: 2, SD: .000	Mean: 5.00, N: 2, SD: .000
Education	Mean: 2.85, N: 27, SD: .907	Mean: 3.33, N: 27, SD: 1.519	Mean: 4.81, N: 27, SD: 1.819	Mean: 4.41, N: 27, SD: 1.421
Finance/Banking	Mean: 2.72, N: 46, SD: .861	Mean: 2.26, N: 46, SD: 1.482	Mean: 3.63, N: 46, SD: 1.525	Mean: 3.24, N: 46, SD: 1.196
Government/Public sector	Mean: 2.40, N: 5, SD: .894	Mean: 1.80, N: 5, SD: 1.789	Mean: 3.40, N: 5, SD: .894	Mean: 3.00, N: 5, SD: 1.225
Health care and Non for profit	Mean: 4.00, N: 3, SD: .000	Mean: 4.00, N: 3, SD: .000	Mean: 6.00, N: 3, SD: .000	Mean: 5.00, N: 3, SD: .000
Healthcare	Mean: 2.76, N: 17, SD: .831	Mean: 2.47, N: 17, SD: 1.231	Mean: 4.18, N: 17, SD: 1.811	Mean: 2.82, N: 17, SD: 1.185
Logistics	Mean: 1.00, N: 1, SD: .	Mean: 5.00, N: 1, SD: .	Mean: 7.00, N: 1, SD: .	Mean: 6.00, N: 1, SD: .
Manufacturing	Mean: 2.65, N: 26, SD: .936	Mean: 3.04, N: 26, SD: 2.088	Mean: 4.23, N: 26, SD: 1.681	Mean: 3.73, N: 26, SD: 1.485
Non-profit	Mean: 2.67, N: 6, SD: .516	Mean: 4.50, N: 6, SD: 1.378	Mean: 5.17, N: 6, SD: 1.169	Mean: 4.33, N: 6, SD: .816
Real Estate	Mean: 3.00, N: 1, SD: .	Mean: 4.00, N: 1, SD: .	Mean: 6.00, N: 1, SD: .	Mean: 5.00, N: 1, SD: .
Services	Mean: 3.47, N: 105, SD: .651	Mean: 4.68, N: 105, SD: 1.661	Mean: 5.63, N: 105, SD: 1.187	Mean: 4.92, N: 105, SD: 1.222
Technology/IT	Mean: 3.25, N: 20, SD: .910	Mean: 3.60, N: 20, SD: 2.062	Mean: 4.90, N: 20, SD: 1.744	Mean: 4.25, N: 20, SD: 1.118

Tropical research on organic matters	Mean: 4.00, N: 1, SD: .	Mean: 6.00, N: 1, SD: .	Mean: 7.00, N: 1, SD: .	Mean: 6.00, N: 1, SD: .
Total	Mean: 3.07, N: 260, SD: .883	Mean: 3.64, N: 260, SD: 1.913	Mean: 4.83, N: 260, SD: 1.683	Mean: 4.22, N: 260, SD: 1.440

ANOVA Table - Sector

Variable	Source	Sum of Squares	df	Mean Square	F	Sig.
Self-Esteem * Sector	Between Groups	49.795	12	4.150	6.739	.000
	Within Groups	152.094	247	.616		
	Total	201.888	259			
Work Engagement * Sector	Between Groups	265.578	12	22.131	8.014	.000
	Within Groups	682.157	247	2.762		
	Total	947.735	259			
Intrinsic Motivation * Sector	Between Groups	204.986	12	17.082	7.988	.000
	Within Groups	528.225	247	2.139		
	Total	733.212	259			
Innovative Behavior * Sector	Between Groups	154.114	12	12.843	8.284	.000
	Within Groups	382.948	247	1.550		
	Total	537.062	259			

Measures of Association - Sector

Variable	Eta	Eta Squared
Self-Esteem * Sector	.497	.247
Work Engagement * Sector	.529	.280
Intrinsic Motivation * Sector	.529	.280
Innovative Behavior * Sector	.536	.287

Size of Your Organization (Number of Employees)

Organization Size	Self-Esteem	Work Engagement	Intrinsic Motivation	Innovative Behavior
Large (250+ employees)	Mean: 3.43, N: 21, SD: .746	Mean: 4.00, N: 21, SD: .949	Mean: 4.90, N: 21, SD: 1.700	Mean: 4.33, N: 21, SD: 1.426
Medium (50-249 employees)	Mean: 2.70, N: 43, SD: 1.013	Mean: 3.30, N: 43, SD: 1.859	Mean: 4.86, N: 43, SD: 1.684	Mean: 3.81, N: 43, SD: 1.419
Micro (1-9 employees)	Mean: 2.74, N: 27, SD: 1.059	Mean: 2.96, N: 27, SD: 1.786	Mean: 4.04, N: 27, SD: 1.911	Mean: 4.04, N: 27, SD: 1.506
Small (10-49 employees)	Mean: 3.17, N: 169, SD: .792	Mean: 3.79, N: 169, SD: 2.009	Mean: 4.93, N: 169, SD: 1.623	Mean: 4.34, N: 169, SD: 1.427

Total	Mean: 3.07, N: 260, SD: .883	Mean: 3.64, N: 260, SD: 1.913	Mean: 4.83, N: 260, SD: 1.683	Mean: 4.22, N: 260, SD: 1.440

ANOVA Table - Organization Size

Variable	Source	Sum of Squares	df	Mean Square	F	Sig.
Self-Esteem * Size	Between Groups	13.130	3	4.377	5.936	.001
	Within Groups	188.759	256	.737		
	Total	201.888	259			
Work Engagement * Size	Between Groups	23.950	3	7.983	2.212	.087
	Within Groups	923.784	256	3.609		
	Total	947.735	259			
Intrinsic Motivation * Size	Between Groups	18.992	3	6.331	2.269	.081
	Within Groups	714.219	256	2.790		
	Total	733.212	259			
Innovative Behavior * Size	Between Groups	10.826	3	3.609	1.755	.156
	Within Groups	526.236	256	2.056		
	Total	537.062	259			

Measures of Association - Organization Size

Variable	Eta	Eta Squared
Self-Esteem * Size	.255	.065
Work Engagement * Size	.159	.025
Intrinsic Motivation * Size	.161	.026
Innovative Behavior * Size	.142	.020