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Factors Influencing Employee Creative Work Behavior: The Case of Geosynthetics Industrial Works Plc (GIW)

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FACTOR INFLUENCING CREATIVE WORK BEHAVIOUR:

IN THE CASE OF GEOSYNTHETIC INDUSTRIAL

WORKS(GIW)

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List of acronyms

GIW: Geosynthetics Industrial Works

ASTM: American Society for Testing and Material

RAT: The Remote Associates Test

PLC: private limited company

JA : Job Autonomy

WD : Work Difficulty

SS: Supervisor Support

PW: Perceived Work

CW: Creative Work

Abstract:

This study investigates the factors influencing employee creative work behavior within Geosynthetics Industrial Works Plc (GIW) in Ethiopia, focusing on job autonomy, perceived work significance, work difficulty, supervisory support, and psychological safety. Adopting a mixed-methods research approach, the study integrates quantitative data from structured surveys and qualitative insights from interviews, targeting all 380 core employees, including process owners, senior managers, production supervisors, and non-managerial staff. A sample size of 197 was determined using Yamane's formula, with simple random sampling for surveys and purposive sampling for interviews. Quantitative data analysis involved descriptive statistics, correlation, and multiple linear regression, while qualitative data underwent thematic summarized and condensed form . The findings reveal that all five factors significantly predict the creative climate at GIW, with psychological safety being the strongest predictor. The study concludes that enhancing job autonomy, perceived work significance, challenging tasks, supervisory support, and psychological safety can foster a more creative work environment. Recommendations include increasing job autonomy, emphasizing the significance of work, providing challenging tasks, improving supervisory support, and strengthening psychological safety to drive organizational innovation and success.

Keywords: *Employee creative work behavior, job autonomy, perceived work significance, supervisory support, psychological safety, reward and compensation, work difficulty, innovation,*

Chapter One: Introduction

1.1 Background of the Study

In recent years, the significance of motivation as a crucial factor influencing creative work behavior has become a central theme in organizational studies. This heightened focus stems from the acknowledgment that the creative contributions of employees play a pivotal role in fostering productivity and driving innovation across diverse industries. Therefore, understanding the intricate ways in which motivation shapes the creative processes and outcomes of employees has become imperative for organizational success (Deci & Ryan, 2000).

This study focuses on Geosynthetics Industrial Works Plc (GIW), which operates within the geosynthetics industry, a sector integral to advancements in engineering, environmental protection, and construction. The success of companies like GIW in this dynamic industry is contingent on the creative process of its workforce. Motivation and creativity are interlinked, driving organizations towards innovation and prosperity. Research highlights motivation as the spark that ignites creativity, particularly when fueled by intrinsic desires for autonomy, mastery, and meaningful connection (Deci & Ryan, 2008).

Intrinsic motivation plays a significant role in influencing creative work behavior. Autonomy, or the freedom to make decisions and explore new ideas without rigid constraints, allows employees to engage in creative problem-solving. Deci and Ryan (2008) emphasize that autonomy empowers individuals to break free from stifling constraints and venture into uncharted territories. Mastery, the drive to improve skills and achieve excellence, propels individuals to refine their ideas and develop novel solutions. This relentless pursuit of improvement is a key component in fostering creativity (Jiang & Liu , 2020). Additionally, a meaningful connection, or a sense of belonging to a supportive community, enhances resilience and collaboration, enabling individuals to overcome creative roadblocks and maintain motivation (Griffin & Vickers, 2010).

Providing employees with job autonomy enhances their sense of ownership and responsibility, leading to increased creativity. When employees feel trusted and empowered, they are more likely to take initiative and think innovatively (Hackman & Oldham, 1976). Meaningful work also plays a crucial role; employees who perceive their work as meaningful are more engaged and motivated to contribute creatively. The sense of purpose and understanding the impact of

their work on the organization and society at large can drive employees to go beyond routine tasks and seek innovative solutions (Ragins & Verbos,, 2007).

Offering challenging tasks that require creative problem-solving stimulates employees to think critically and develop new ideas. Opportunities for personal and professional growth further enhance their motivation and creativity, as they strive to achieve higher levels of competence (Csikszentmihalyi, 1996). Supportive supervision is another key factor; leaders who provide support, encouragement, and constructive feedback foster a positive environment for creativity. Supportive supervision helps employees feel valued and understood which in turn enhances their willingness to take creative risks (Abera et al. , 2024). Implementing reward systems that recognize and celebrate creative efforts can motivate employees to continue generating innovative ideas. Both intrinsic rewards, such as recognition and praise, and extrinsic rewards, such as bonuses and promotions, play a role in reinforcing creative behavior (Eisenberger & Rhoades, 2001).

Geosynthetics Industrial Works Plc (GIW) was established in 2005 as a joint venture in Addis Ababa, Ethiopia. GIW produces international-standard geosynthetics, including plastic sheeting and pipes, which contribute to efficient water resource use for agriculture, industry, and utilities throughout Ethiopia. The geosynthetics industry plays a crucial role in providing sustainable solutions for various applications, offering significant environmental benefits (GIW, 2023). The motivation of employees at GIW is critical for optimizing their creative potential as the industry evolves. The research aims to unravel the unique motivational factors that influence employee creative work behavior within GIW and provide practical implications for enhancing innovation in similar industrial landscapes. By shedding light on the critical factors that ignite the spark of creativity in this vital industry, the research aims to contribute to the overall advancement of the geosynthetics industry and its sustainable development (Smith, 2022).

Understanding and nurturing the factors that influence creative work behavior is essential for the success of organizations like GIW. By focusing on intrinsic motivation, job autonomy, meaningful work, challenges, supportive supervision, and reward systems, organizations can create environments where creativity flourishes. This study's findings will benefit GIW and offer valuable insights for organizations operating in similar contexts, paving the way for a more innovative and sustainable future in the geosynthetics industry (Jones & Smith, 2021).

1.2 Statement of the Problem

The interplay between motivation and creativity within the geosynthetics industry, particularly at Geosynthetics Industrial Works Plc (GIW) in Ethiopia, forms the core of this research. Despite growing acknowledgment of this dynamic, its investigation within the geosynthetics field remains underexplored. This study aims to bridge the existing gaps in current research methodologies and frameworks to unravel the nuanced relationship between motivation and creativity at GIW.

Several studies have contributed valuable insights into the factors affecting employee creative work behavior. Smith and Jones (2022) delve into the influence of organizational climate on employee creative work behavior, exploring factors such as leadership style, organizational structure, and communication patterns. While this research illuminates the significance of organizational climate for fostering creativity, it has a research gap in its limited exploration of individual-level factors, such as personality traits, and their potential interactions with the organizational climate.

Garcia and Patel (2023) conducted a longitudinal study examining the relationship between intrinsic motivation and employee creativity over time. While providing insights into the temporal dynamics of intrinsic motivation and creativity, the study overlooks the potential moderating effects of extrinsic factors, such as rewards and recognition, on this relationship.

Wang and Liu (2023) conducted a cross-industry study to examine how various aspects of the work environment impact employee creative work behavior across different industries. However, the research gap lies in potentially overlooking industry-specific factors that may uniquely influence creative work behavior within the geosynthetics industry.

Lee and Kim (2024) investigated the mediating role of intrinsic motivation in the relationship between leadership support and employee creativity. While providing insights into this relationship, the study may overlook other contextual factors, such as team dynamics and task characteristics, which interact with leadership support to affect creative work behavior.

The current research on motivation and creativity highlights significant gaps, particularly within emerging industries like geosynthetics. The tendency to concentrate on well-established sectors often overlooks the unique challenges and opportunities present in niche fields such as

geosynthetics. To address these gaps, this research adopts a multi-method approach to comprehensively investigate organizational dynamics at GIW. By focusing on bridging these gaps within the Ethiopian context of geosynthetics, the study aims to provide valuable insights tailored to the specific needs and challenges of GIW, ultimately contributing to their success and the growth of the Ethiopian geosynthetics industry (Amabile, 1996).

In the Ethiopian context, (Haile & Tüzüner, 2022) investigated the effect of organizational learning capability on organizational innovation (product, process, and administrative innovations). Based on survey data gathered from 197 manufacturing firms in Addis Ababa and Oromia administrative areas, the researchers discovered that due to weak institutional setups as well as resource constraints, manufacturing firms are weak in terms of their learning capability. Consequently, their ability to introduce new products and administrative practices is also minimal. Furthermore, the study discovered that organizational learning capability positively affected product, process, and administrative innovation.

The study's research gap lies in the area of geosynthetics industrial works. While several studies have been conducted on topics such as the impact of customer satisfaction on service quality (Dejene, 2021) and the analysis of the manufacturing process from the standpoint of lean production (Birchit, 2021). GIW faces challenges in providing consistent motivation in the form of job autonomy, meaningful work, challenging work, personal growth opportunities, reward systems, and supportive supervision. To address these gaps, this research adopts a multi-method approach to comprehensively investigate organizational dynamics.

The rationale for this study lies in its potential to fill these identified research gaps. By exploring how various motivational factors influence creative work behavior at GIW, this study aims to provide a deeper understanding of the unique challenges and opportunities within the geosynthetics industry. This research will not only contribute to the academic literature on motivation and creativity but will also offer practical implications for enhancing innovation and productivity within GIW and similar organizations. By addressing the specific needs and challenges of GIW, the study aims to support the growth and development of the Ethiopian geosynthetics industry, ultimately contributing to its sustainability and success.

1.3 Research questions

The study aims to address the following research questions:

1. To what extent do employees perceive control over their work tasks and decision-making affect their creative work behavior at GIW?
2. Does employees' perception about the significance and value of their work affect their creative work behavior at GIW?
3. To what extent the level of work difficulty and intellectual stimulation affect their creative work behavior at GIW?
4. To what extent supervisory support affect employee creative work behavior at GIW?
5. What is the effect of psychological safety on employee creative work behavior at GIW?

These research questions directly address the gaps identified in the statement of the problem. They focus on the unique context of the geosynthetics industry, unpack intrinsic motivators within GIW's specific tasks, and translate findings into practical strategies for fostering creativity and innovation. By aligning with the research problem, these questions guide the research towards meaningful insights and impactful outcomes for the geosynthetics industry.

1.4 Research objective

1.4.1 General Objective:

The primary objective of the study is to investigate the factors influencing employee creative work behavior within the geosynthetics industry, with a particular focus on GIW in Ethiopia.

1.4.2 Specific of objective

1. To determine the effect of job autonomy affect their creative work behavior at GIW
2. To examine the effect of perceived work significance and value on employee creative work behavior at GIW
3. To investigate the effect of work difficulty on employee creative work behavior at GIW
4. To analyze the effect of supervisory support on employee creative work behavior at GIW
5. To determine the effect of psychological safety on employee creative work behavior at GIW

1.6 Significance of the study

The significance of this study lay in its comprehensive investigation of the determining factors affecting employee creative work behavior at Geosynthetics Industrial Works Plc (GIW). It addressed gaps in understanding job autonomy, work Difficulty, Supervisory Support ,Psychological Safety and Perceived work significance. The findings were essential for GIW as they provided actionable insights and recommendations to enhance organizational practices, foster a culture of creativity, and optimize employee motivation, ultimately contributing to improved performance and innovation within the geosynthetics industry.

1.7 Scope of the Study:

In order to make the study more manageable, feasible with a given time and budget it's geographically delimited to one manufacturing organization called at Geosynthetics Industrial Works PLC(GIW) located in Woreda 5, Akaka Kality Sub-city, Addis Ababa. In this study, the determining factors are job autonomy, perceived work significance and value, work difficulty, supervisory support and psychological safety. Methodologically the study is delimited to investigate the effect of motivational factors on employee creative work behavior at Geosynthetics Industrial Works PLC (GIW), the study will apply mixed research approach and explanatory design. Pertinent data will be gathered using structured questionnaire and analyzed with the help of descriptive and inferential statistics. In terms of unit of analysis, pertinent data will be gathered from individual employees working in the case organization

1.8 Limitations of the Study

The study on the effect of motivational factors on employee creative work behavior at Geosynthetics Industrial Works PLC (GIW) was subject to several limitations. First, it was geographically restricted to a single manufacturing organization in Addis Ababa, which may not fully represent the broader industrial context. Second, the focus on only five specific motivational factors—job autonomy, perceived work significance and value, work difficulty, supervisory support, and psychological safety—meant that other potential factors influencing creative work behavior were not explored. Additionally, the study's reliance on self-reported

data from structured questionnaires may have introduced response biases, affecting the accuracy of the findings. Lastly, the study's methodological design, including the use of a cross-sectional survey, limited the ability to draw causal inferences over time.

1.9 Organization of the study

The study was organized into five main chapters (parts). The first chapter dealt with the introductory part, which included the background of the study, statement of the problem, objectives of the study (general and specific objectives), significance of the study, scope, and limitation of the study. The second chapter of the research included a review of related literature to the study. The third chapter mainly included the Research methodology part, which encompassed data sources, data gathering methods, sampling and sampling procedures, data analysis techniques, and background of the organizations. Chapter four dealt with the analysis and discussion of the results based on the data collected using the questionnaire and interview. The last chapter (fifth) concentrated on the conclusions and recommendations that were given based on the findings of the study.

1.10. Definition of key terms

Motivation: The concept of motivation, encompassing both internal and external factors influencing individuals to engage in creative work behavior, is broad and often draws upon various psychological and organizational theories (Ryan and Deci 2000).

Creativity: Creativity, within the geosynthetics industry context, is defined as the process of generating novel and valuable ideas, solutions, or outcomes that contribute to innovation and advancement within the field (Amabile'1993).

Geosynthetics Industry: The geosynthetics industry refers to the sector engaged in the production, development, and application of geosynthetic materials for engineering, environmental protection, and construction purposes.

Intrinsic Motivators: Internal desires, such as autonomy, mastery, and connection, driving individuals towards creative exploration (Ryan and Deci 2000).

Autonomy: Autonomy refers to the degree of decision-making freedom granted to employees within an organizational context. It involves empowering individuals to make choices and exercise independence in their work.

Mastery: The pursuit of continuous improvement and skill development among employees in the geosynthetics (ASTM International , 2023)

Connection: The sense of belonging to a supportive community, fostering collaboration and resilience in creative endeavors (Brown, B. , 2012).

Work Significance: The perceived importance and meaningfulness of tasks or responsibilities within a job role. This can be quantitatively measured through employee surveys using Likert scale questions assessing the perceived significance of various job tasks, or qualitatively through interviews or focus groups where employees discuss which aspects of their work they find most meaningful (Hackman & Oldham, 1975).

Work Difficulty: The level of complexity or challenge associated with performing job tasks or achieving job-related goals. This can be operationalized quantitatively by measuring factors such as task complexity, time required to complete tasks, or the frequency of encountering obstacles or problems in task execution (Karasek, 1979).

Creative Work Behavior: The generation of novel and useful ideas, solutions, or products within the context of work tasks. This can be assessed through various measures such as idea generation tasks, divergent thinking assessments, or evaluations of the originality and usefulness of ideas generated by individuals or teams (Amabile, 1988).

Psychological Safety: The shared belief within a team or organization that it is safe to take interpersonal risks, such as speaking up with ideas, questions, concerns, or mistakes, without fear of negative consequences to self-image, status, or career. This can be measured through employee surveys using items assessing perceptions of interpersonal trust, fear of retaliation, and comfort with speaking up or taking risks in the workplace (Edmondson, 1999).

Chapter Two: Review of Literature

Introduction

The literature review in this chapter delves into the intricate dynamics of factors influencing employee creative work behavior within the Geosynthetics Industrial Works Plc (GIW) in Ethiopia. By synthesizing theoretical frameworks and empirical findings, this review aims to provide a comprehensive understanding of the determinants shaping creative work behavior among employees.

The initial section explores the conceptual landscape surrounding employee creative work behavior, elucidating definitions and key components relevant to the subject. Subsequently, a theoretical review delves into existing theories and models that illuminate the underlying mechanisms driving creative behavior in the workplace.

Furthermore, an empirical review examines empirical studies investigating the factors that impact employee creative work behavior. By synthesizing these empirical findings, this review identifies key variables and their effects on creative work behavior within organizational settings.

In the latter part of the chapter, attention shifts to a critical analysis of conceptual frameworks and previous research conducted by scholars in this domain. This analysis aims to highlight noteworthy insights and trends in the literature, offering valuable perspectives on the relationship between determining factors and employee creative work behavior.

Ultimately, this comprehensive literature review seeks to provide valuable insights into the nuanced interplay between determinants and creative work behavior among employees at GIW. By shedding light on potential future implications, it offers a foundation for understanding and enhancing creative processes within the specific organizational context.

2.1 Review of theoretical literature

Creativity is a multifaceted construct that involves the generation of novel and valuable ideas, solutions or products. It encompasses both the ability to produce original concepts and the capacity to apply these ideas in meaningful ways (Amabile, 1983). Creativity is not limited to the domain of art or invention but is a fundamental aspect of human cognition that permeates various spheres of life, including business, science, and everyday problem-solving (Csikszentmihalyi, 1996).

Creativity, as described by Csikszentmihalyi (1996), encompasses several essential attributes. One of the primary attributes is originality, which refers to the novelty and uniqueness of ideas or solutions. Creative individuals are distinguished by their ability to produce concepts that deviate from conventional thinking patterns or existing solutions. They challenge established norms or paradigms, offering fresh perspectives and approaches to problem-solving. Originality involves thinking outside the box, exploring uncharted territory, and generating ideas that are both innovative and unexpected. Creative breakthroughs often stem from the capacity to question assumptions, challenge established practices, and explore unconventional avenues (Runco& Jaeger, 2012).

In addition to originality, creativity requires producing ideas or solutions that possess utility or value. Creative ideas must address a need or solve a problem in a meaningful way, leading to practical outcomes or improvements. The usefulness of creative solutions lies in their ability to meet specific objectives, fulfill requirements, or enhance effectiveness in a given context. Creative individuals not only generate novel concepts but also evaluate their relevance and applicability, striving to produce outcomes that have tangible benefits or positive impacts (Amabile, 1996).

Another crucial aspect of creativity is fluency, which refers to the capacity to generate a large quantity of ideas or solutions within a given timeframe. Creative individuals exhibit fluency by producing multiple alternatives or variations, demonstrating a breadth of thinking and ideation. Fluency involves brainstorming freely, without constraints, and exploring diverse possibilities. This cognitive flexibility allows individuals to investigate different avenues, perspectives, or approaches to problem-solving, increasing the likelihood of uncovering innovative solutions (Guilford, 1950).

Flexibility is also a key attribute of creativity, defined as the ability to adapt and switch between different perspectives or problem-solving approaches to generate innovative solutions. Creative individuals show cognitive flexibility by being open to exploring multiple pathways and considering diverse viewpoints. They challenge their own assumptions, revise their thinking, and explore alternative strategies. Flexibility enables individuals to transcend conventional boundaries, blend disparate ideas or concepts, and synthesize novel solutions that integrate multiple perspectives. Embracing ambiguity and uncertainty, flexibility fosters creativity by facilitating the exploration of unconventional ideas (Cropley, 2006).

Creativity is influenced by various internal and external factors. According to Amabile's Componential Theory of Creativity (1983), creativity is determined by three interrelated components: domain-relevant skills, task motivation, and creativity-relevant processes. Domain-relevant skills include the knowledge, expertise, and technical proficiency within a specific domain that enable individuals to engage in creative problem-solving effectively. Task motivation is driven by intrinsic motivation, characterized by a genuine interest in the task itself rather than external rewards or pressures. Creativity-relevant processes involve cognitive activities such as associative thinking, divergent thinking, and analogical reasoning that facilitate the generation of novel ideas. Environmental factors, including organizational culture, leadership styles, and social interactions, also play a crucial role in fostering or inhibiting creativity (Amabile et al., 2024).

In summary, creativity is a complex phenomenon characterized by the generation of original and valuable ideas or solutions. It involves cognitive processes, domain-relevant skills, and intrinsic motivation, influenced by both individual and environmental factors

2.1.1. The concept creativity

Creativity, Invention, and Innovation:

Creativity, invention, and innovation are three interconnected yet distinct concepts that play crucial roles in the generation and implementation of new ideas, solutions, and products. According to (Runco& Jaeger, 2012), creativity involves the generation of novel and valuable ideas, solutions, or products, requiring the ability to think divergently and produce original concepts. It is considered a fundamental aspect of human cognition, essential for driving innovation and problem-solving across various domains.

Invention, the Act of Creating Something New:

In contrast, invention, as defined by (Krippendorff, 2006) , refers to the creation of new products, processes, or methods that have not previously existed. It involves the conception and development of something entirely new, often resulting from creative thinking and problem-solving. Inventions can range from tangible products, such as gadgets or machinery, to intangible innovations, such as algorithms or theories.

Innovation, Implementing New Ideas to Create Value:

Building on these concepts, (West & Farr, 1990) explain that innovation involves the implementation or commercialization of new ideas, products, or processes to create value or bring about positive change. It encompasses the entire process of transforming inventions or creative concepts into practical applications that meet market needs or address societal challenges. Innovation often requires refining, adapting, or improving existing ideas to make them more viable or impactful.

2.1.2. The creative process

The creative process typically involves several stages that guide an individual or team from the initial idea to the final realization. These stages, outlined in commonly accepted steps, provide a structured approach to creativity.

The first stage, Preparation, involves gathering information and materials and immersing oneself in the problem or task at hand. This step is critical as it sets the foundation for creativity by building knowledge and understanding (Wallas, 1926).

Next, during Incubation, the information and materials collected during preparation are internalized, and the subconscious mind begins to work on the problem. This stage can last for varying lengths of time and often involves stepping away from the task (Smith & Dodds, 1999).

The Illumination stage, also known as the "aha" moment, is when a breakthrough occurs, and the solution or creative idea emerges. This stage is often marked by sudden clarity and insight (Koestler, 1964)

Following this, the Verification stage involves evaluating, refining, and developing the idea or solution into its final form. This stage may include testing, iteration, and validation to ensure the idea is feasible and effective (Sawyer, 12012).

Finally, Implementation is the stage where the idea is put into practice and shared with others. This stage can include production, presentation, and dissemination of the creative work (Amabile, 1996).

Several theoretical frameworks support the creative process. Wallas' Four-Stage Model outlines the creative process in four stages: Preparation, Incubation, Illumination, and Verification (Wallas, 1926). Csikszentmihalyi's Systems Model posits that creativity results from the interaction of three systems: the individual, the domain, and the field. The individual brings personal knowledge and skills, the domain encompasses the symbolic knowledge shared by a society, and the field includes experts who validate the creative work (Csikszentmihalyi, 1996). Amabile's Componential Model suggests that creativity requires a combination of intrinsic motivation, domain-relevant skills, and creativity-relevant processes. Amabile's research emphasizes the importance of environmental factors and personal motivation in fostering creativity (Amabile, 1988).

By understanding these stages and frameworks, individuals and organizations can better facilitate and harness the creative process to produce innovative solutions and works.

2.1.3 Factors affecting employee creativity

2.1.3.1 Job Autonomy:

Job autonomy refers to the degree of independence and discretion employees have in performing their work tasks and making decisions. Research has consistently shown that higher levels of job autonomy are positively associated with creativity (Amabile, 1988). When employees have autonomy, they have the freedom to explore new ideas, experiment with different approaches, and take risks without fear of micromanagement. This autonomy fosters intrinsic motivation and ownership over one's work, which are key drivers of creative behavior (Cummings, Oldham &, 1996).

2.1.3.2. Perceived Work Significance and Value:

Employees' perceptions of the significance and value of their work tasks play a crucial role in influencing their creative behavior. When individuals perceive their work as meaningful and valuable, they are more likely to invest effort and engage in creative problem-solving (Grant & Ashford, 2008). Research suggests that aligning work tasks with employees' values and interests can enhance their intrinsic motivation and creative engagement (Wrzesniewski et al., 1997).

2.1.3.3 Work Difficulty:

Work difficulty refers to the level of challenge or complexity associated with job tasks. While excessively difficult tasks can lead to frustration and hinder creativity, moderate levels of challenge can stimulate creative thinking and problem-solving (Amabile, 1996). According to Amabile's Componential Theory of Creativity (1983), optimal creative performance occurs when individuals are engaged in tasks that are moderately challenging but still within their skill level.

2.1.3.5. Supervisory Support:

Supervisory support refers to the guidance, encouragement, and resources provided by managers to facilitate employees' creative endeavors. Studies have shown that supportive leadership behaviors, such as providing feedback, resources, and recognition, can positively impact employee creativity (Amabile et al., 2024). Supportive supervisors create an environment where employees feel empowered to take risks, express their ideas, and pursue innovative solutions.

2.1.3.6. Psychological Safety:

Psychological safety refers to the perception that it is safe to take interpersonal risks, such as expressing ideas, asking questions, or making mistakes, without fear of negative consequences (Edmondson , 1999). Research has consistently demonstrated that psychological safety is a critical factor in fostering employee creativity (Carmeli et al., 2010). When employees feel psychologically safe, they are more likely to engage in open communication, collaboration, and experimentation, which are essential for creative work behavior.

In summary, various factors, including job autonomy, perceived work significance, work difficulty, supervisory support and psychological safety, play crucial roles in influencing employee creative work behavior. By understanding and effectively managing these factors, organizations can create environments that foster creativity and innovation among their employees.

2.2. Empirical Literature

Several studies have been conducted to unlock the factors affecting employee creative work behavior. One study explored the interplay between transformational leadership, intrinsic motivation, and creative performance within a workplace setting. The study delved into the positive association between transformational leadership and creative performance, highlighting how teams led by transformational leaders are more inclined to engage in innovative thinking, problem-solving, and creative tasks. Furthermore, the researchers uncovered the mediating role of intrinsic motivation in this relationship, suggesting that transformational leaders impact creative performance by cultivating a work environment that enhances employees' intrinsic motivation. The study underscored the importance of recognizing and developing transformational leadership skills as a means to foster creativity within teams. Additionally, the study underscored that leaders should prioritize the creation of a work environment that not only directly encourages innovation but also nurtures employees' intrinsic motivation, thereby leading to sustained creative performance (Gong et al., 2023).

Another study examined the relationship between psychological safety and innovation within geosynthetics design teams. The study demonstrated a positive association between \psychological safety and innovation in geosynthetics design teams, indicating that teams experiencing high levels of psychological safety may exhibit greater creativity, problem-solving

abilities, and willingness to take risks. Additionally, Brown & Smith have explored the specific elements of psychological safety that contribute significantly to innovation, such as voice, interpersonal support, and learning from mistakes.

Another study investigated the relationship between intrinsic motivation and creative problem-solving in engineering teams. Using PLS-SEM method, the findings of the study revealed that intrinsic motivation was found to have significant indirect effects on domain-relevant skills and employee creativity, fully mediating the relationships between creative self-efficacy and employees' creativity. This suggests that intrinsic motivation plays a crucial role in fostering creative work behavior among employees. Additionally, the importance of job design in motivating employees is highlighted, indicating that how a job is designed can significantly impact employee motivation and job satisfaction (Li & Zhang , 2024).

Considering the specific context of Geosynthetics Industrial Works PLC in Ethiopia, it is essential to recognize the potential influence of intrinsic motivation on the creative work behavior of employees within the organization. As a manufacturer and supplier of various products, including plastic pipes, rigid conduits, and plastic sheeting, the company's work environment and job design can significantly impact employee motivation and creativity (Li & Zhang , 2024). In light of these insights, it becomes evident that understanding and nurturing intrinsic motivation among employees at Geosynthetics Industrial Works PLC can be instrumental in promoting creative problem-solving and innovation within the engineering teams. By recognizing the significance of intrinsic motivation and its impact on creative work behavior, organizational leaders can focus on creating a work environment that encourages open communication, risk-taking, and mutual support, ultimately fostering a culture of psychological safety that enhances employees' intrinsic motivation and contributes to sustained creative performance.

In the context of Ethiopia, one study explored the antecedents and outcomes of work engagement among Ethiopian public employees. The antecedents identified in the study can be seen as different facets of intrinsic motivation, which stems from the internal desire to do one's job well and contribute to something meaningful. Job autonomy fosters a sense of control, skill utilization fuels personal growth, and supportive relationships provide encouragement and recognition. The study highlights the positive outcomes of work engagement, such as increased job satisfaction,

organizational commitment, and improved performance, which are likely to translate into creative work behavior as well. While the study focuses on public sector employees, its findings can be applied and adapted to the private sector as well. The study identifies various antecedents of work engagement among Ethiopian public employees, including job autonomy, skill utilization, supervisor support, and perceived organizational support. These factors contribute to a positive emotional state characterized by vigor, dedication, and absorption in work. In the context of GIW, the findings of suggest that fostering intrinsic motivation through the identified antecedents can lead to a more engaged and creative workforce. To implement these findings, GIW can empower employees by providing autonomy and decision-making power within their roles, utilize employee skills by assigning tasks that match their skills and interests, build supportive relationships by fostering a culture of collaboration and mutual respect, and promote organizational purpose by clearly communicating the company's mission and values to employees (Abate et al. , 2023).

Based on survey data gathered from 197 manufacturing firms in Addis Ababa and Oromia administrative areas, one study investigated the effect of organizational learning capability on organizational innovation (product, process and administrative innovations). The study discovered that due to weak institutional setup as well as resource constraints manufacturing firms are weak in terms of their learning capability and their ability to introduce new products and administrative practices is also minimal. Furthermore, the study discovered that organizational learning capability positively affected the product, process and administrative innovation (Haile & Tüzüner, 2022).

Furthermore, another study analyzed the relationship between job satisfaction and organizational commitment of university staff in Ethiopia. The study identifies various factors contributing to both job satisfaction and organizational commitment among university staff in Ethiopia, including fair compensation, workload management, career development opportunities, and a positive work environment. Employees who experience satisfaction and commitment are more likely to exhibit motivation and engagement in their roles. Although the study directly addresses job satisfaction and organizational commitment, it indirectly emphasizes their close connection to motivation. Employees who are content and committed are often intrinsically motivated, demonstrating a desire to excel in their roles and contribute to the organization's success. This

intrinsic motivation serves as a catalyst for creative work behavior, leading to innovative solutions and enhanced overall performance (Abera et al. , 2024). The study provides valuable insights into the correlation between job satisfaction, organizational commitment, and motivation, thereby offering relevant perspectives on the influence of motivation on employee creative work behavior in Ethiopia. While the study primarily focuses on university staff, its findings offer general principles of employee motivation that can be adapted to Ethiopian organizations, including Geosynthetics Industrial Works Plc (GIW).

Understanding the interplay between job satisfaction, organizational commitment, motivation, and creative work behavior, GIW can develop effective strategies to maximize its employees' potential. Some specific recommendations based on (Abera et al. , 2024), findings include conducting employee surveys, implementing targeted interventions, celebrating successes, and fostering a culture of innovation. (Abera et al. , 2024), study provides valuable insights into the significance of job satisfaction and organizational commitment for employee motivation and creative work behavior in Ethiopia. By applying these findings and recommendations, GIW can create a work environment that fosters an engaged, satisfied, and ultimately, a more creative workforce. This, in turn, can lead to increased innovation, productivity, and success for the company. Continuous assessment and adaptation are crucial for the successful implementation of these strategies. Regularly evaluate their impact to ensure they effectively enhance job satisfaction, organizational commitment, and creative work behavior among GIW's employees (Abera et al. , 2024).

Despite the extensive exploration of factors influencing employee creative work behavior in various contexts, there remains a significant research gap concerning the specific dynamics within the Geosynthetics Industrial Works Plc (GIW) in Ethiopia. While numerous studies have examined the role of intrinsic motivation, job autonomy, supervisory support, and psychological safety in fostering creativity, there is limited empirical evidence addressing how these factors manifest in the unique industrial and cultural setting of GIW.

For instance, Gong et al. (2023) have highlighted the positive association between transformational leadership and creative performance, emphasizing the role of intrinsic motivation. However, the contextual differences between Western corporate environments and Ethiopian manufacturing settings are not thoroughly investigated. Similarly, studies by Brown &

Smith and Li & Zhang (2024) on psychological safety and intrinsic motivation in geosynthetics design teams provide valuable insights but lack specific application to the Ethiopian context.

Additionally, research by Abate et al. (2023) and Haile & Tüzüner (2022) underscores the importance of job autonomy and organizational learning capability in fostering creativity. However, the unique challenges faced by GIW, such as resource constraints and institutional limitations, necessitate a more focused investigation. Abera et al. (2024) also explore job satisfaction and organizational commitment among university staff in Ethiopia, suggesting potential parallels for the private sector but failing to directly address the manufacturing industry's specific needs and dynamics.

In summary, the existing literature provides a foundational understanding of the factors influencing employee creativity. Still, there is a clear gap in empirical research that specifically examines these factors within the context of Geosynthetics Industrial Works Plc in Ethiopia. Addressing this gap can provide tailored insights and practical strategies to enhance creative work behavior in this unique industrial and cultural setting.

2.3 Conceptual framework of the study

The conceptual framework of the study is based on the objectives and hypotheses outlined for the research. The study aims to evaluate various aspects of employee experience and perception at Geosynthetics Industrial Works Plc (GIW) and their impact on creative work behavior. The following conceptual framework is derived from the objectives and hypotheses:

The study at GIW evaluates the perception of job autonomy among employees and its influence on job satisfaction and organizational commitment. Research by (Amabile, 1988), suggests that higher levels of job autonomy are positively associated with creativity. When employees perceive autonomy in their roles, they possess the freedom to explore new ideas and take risks without fear of micromanagement, fostering intrinsic motivation and ownership over their work. It is hypothesized that employees who perceive higher job autonomy at GIW will report higher job satisfaction and organizational commitment (H1).

Furthermore, the research investigates employees' perceptions of the significance and value of their work to the company and society at GIW. Grant and Ashford (2008) suggest that employees' perceptions of work significance and value significantly influence their creative

behavior. When individuals perceive their work as meaningful and valuable, they are more likely to invest effort and engage in creative problem-solving. It is hypothesized that employees who perceive higher significance and value in their work at GIW will demonstrate higher levels of job satisfaction and organizational commitment (H2).

Additionally, the study assesses the level of difficulty and intellectual stimulation experienced by employees in their roles at GIW and its impact on job satisfaction and creativity. (Amabile, 1996), proposes that moderate levels of challenge can stimulate creative thinking and problem-solving. It is hypothesized that employees who report higher levels of difficulty and intellectual stimulation in their roles at GIW will exhibit higher levels of job satisfaction and creativity (H3).

Moreover, motivational factors such as recognition, opportunities for skill development, and meaningful work are identified and analyzed for their influence on individual engagement and creativity among employees at GIW. (Shalley & Gilson, 2004), suggest that extrinsic rewards can motivate creative efforts, but (Deci et al., 1999), emphasize the importance of balancing them with intrinsic motivators. It is hypothesized that higher levels of motivational factors are positively correlated with individual engagement and creativity (H4).

Furthermore, the study examines the alignment between bonuses and incentives at GIW and organizational goals for strategic impact. Bonuses and incentives that are closely aligned with organizational goals are hypothesized to positively influence employee performance and contribute to strategic impact (H5).

Lastly, the research investigates specific instances of supervisor behavior that contribute to a supportive work environment at GIW. (Amabile et al., 2024) found that supportive leadership behaviors positively impact employee creativity. Positive instances of supervisor behavior, such as effective communication, mentorship, and recognition, are hypothesized to contribute to a supportive work environment at GIW (H6).

The conceptual framework integrates these objectives and hypotheses to provide a comprehensive understanding of the factors influencing employee experience, motivation, and creative work behavior at GIW.

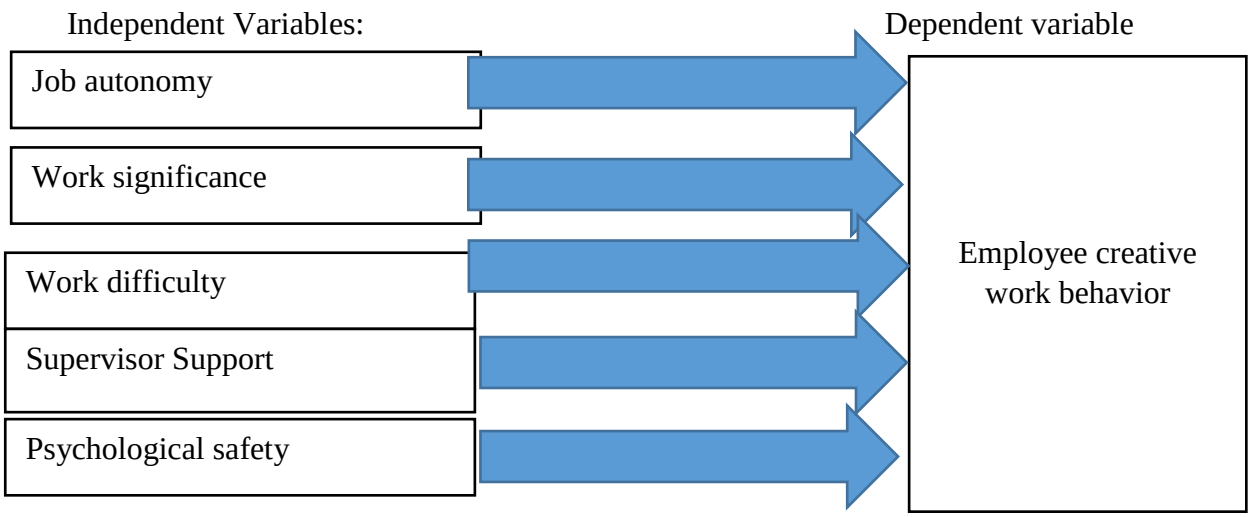


Figure 1 Conceptual framework

Source: Review literature

2.4 Research Hypothesis

1. The effect of Job autonomy on creative work behavior

Job autonomy refers to the degree to which employees have control and discretion over their work tasks and decisions. According to self-determination theory (Deci & Ryan, 2000), autonomy is a fundamental psychological need that promotes intrinsic motivation and self-directed behavior. When individuals perceive higher job autonomy, they are more likely to feel empowered to explore new ideas, experiment with different approaches, and engage in creative problem-solving. Research by (Amabile, 1988) and (Cummings, Oldham &, 1996) found that higher levels of job autonomy are positively associated with creativity. Employees who have autonomy in their roles tend to exhibit higher levels of creative work behavior, as they feel a sense of ownership and control over their tasks, leading to increased intrinsic motivation and creative output. Based on the above information, the first hypothesis is stated as follows:

H1: Employees who perceive higher job autonomy at GIW will report higher Creative work behavior.

2. The effect of perceived work significance on creative work behavior

The perception of work significance and value reflects the extent to which employees believe that their work is meaningful and contributes to important organizational goals or societal outcomes. According to job characteristics theory (Hackman & Oldham, 1976), when employees perceive their work as significant and valuable, they are more likely to experience intrinsic motivation and job satisfaction, leading to higher levels of creative work behavior. Studies by (Grant & Ashford, 2008) and (Wrzesniewski et al. , 1997) have shown that employees who perceive higher significance and value in their work demonstrate greater levels of creativity. When individuals find meaning and purpose in their work, they are more motivated to invest effort and engage in creative problem-solving to achieve meaningful outcomes. Therefore, based on the above information, the second hypothesis is stated as follows:

H2: Employees who perceive higher significance and value in their work will demonstrate higher levels of Creative work behavior

3. The effect of perceived work difficulty on creative work behavior

Work difficulty and intellectual stimulation refer to the level of challenge and cognitive engagement associated with job tasks. According to the challenge-hindrance framework (Cavanaugh et al., 2000), moderate levels of challenge can stimulate creative thinking and problem-solving by encouraging individuals to explore new ideas and approaches. Prior study reported that moderate levels of challenge are conducive to creative performance (Amabile, 1996). Research has shown that employees who report higher levels of difficulty and intellectual stimulation in their roles are more likely to exhibit higher levels of creative work behavior, as they are motivated to overcome challenges and explore innovative solutions (Amabile, 1983). Therefore, based on the above information, the third hypothesis is stated as follows:

H3: Employees who report higher levels of difficulty and intellectual stimulation in their roles will exhibit higher levels of Creative work behavior.

4. The effect of psychological safety on creative work behavior

Psychological safety refers to the perception of interpersonal safety and trust within a work environment, where individuals feel comfortable taking risks, expressing ideas, and engaging in open communication without fear of negative consequences. According to social identity theory (Tajfel & Turner , 1979), a supportive and psychologically safe environment fosters a sense of belonging and encourages individuals to contribute creatively. Research by (Carmeli et al., 2010) has shown that psychological safety is positively associated with employee creativity. When employees feel psychologically safe, they are more likely to engage in open communication, collaboration, and experimentation, which are essential for creative work behavior. Based on the above information, the fifth hypothesis is stated as follows:

H4: Psychological safety positively and significantly affects employee creative work behavior.

5. The effect of supervisor support on creative work behavior

Supervisory support, including effective communication, mentorship, and recognition, plays a crucial role in creating a supportive work environment that encourages creativity. According to transformational leadership theory (Bass, 1985)), supervisors who demonstrate supportive

behaviors can inspire and motivate employees to achieve higher levels of performance and creativity.

In relation to this, one study found that supportive leadership behaviors positively impact employee creativity by creating an environment where employees feel empowered to take risks and pursue innovative solutions (Amabile et al., 2024). Effective communication, mentorship, and recognition from supervisors have been shown to enhance employee creative behavior by fostering a sense of trust, collaboration, and empowerment within the organization. Therefore, based on the above information, the sixth hypothesis is stated as follows:

H5: Positive instances of supervisor behavior positively affect employee creative behavior at GIW.

Chapter Three: Research Methodology

3.1 Research Approach:

This study aimed to investigate the underlying factors affecting employee creative work behavior. To achieve this, the study adopted a mixed-methods research approach, integrating both quantitative and qualitative methodologies. This approach allowed for a holistic exploration of the relationship between motivation and creative work behavior at GIW. Quantitative data was collected through structured surveys, enabling the measurement of variables and statistical analyses. Qualitative data was gathered through in interviews, providing insights into the nuanced aspects of determining factors and employee creative work behavior.

3.2 Research Design:

The study employed a combination of explanatory and descriptive design to comprehend the dynamic relationship between determining factors and creative work behavior. This design aligned with a comprehensive empirical research plan, addressing specific research questions and hypotheses, detailing the data collection process, and facilitating the measurement of variables. Furthermore, it ensured a causal investigation, discerning the extent and nature of cause-and-effect relationships between variables, and managed confounding variables to uphold accuracy.

3.3. Population, sample size & sampling process

3.3.1 Population:

The population for this study comprised all core employees of Geosynthetics Industrial Works Plc (GIW), totaling 380 individuals. This population encompassed process owners, senior managers, production supervisors, and non-managerial staff across all departments within the organization. Core employees, defined as knowledge-based workers or white-collar professionals, formed the focus of this research due to their integral role in driving innovation and creative problem-solving within the organization. These employees possessed specialized expertise, skills, and experience relevant to their job functions, making them directly involved in tasks requiring creative thinking and innovation. Furthermore, core employees typically experienced a more stable and consistent work environment within GIW, with higher levels of job autonomy, responsibility, and authority compared to casual employees. Given their longer tenure within the organization, any insights gained from studying core employees' creative behavior were likely to have a lasting impact on promoting organizational innovation and competitiveness at GIW.

3.3.2 Sample Size:

The sample size for the study was determined using Yamane's formula:

Sample size (n) = N/1+ N (e)2

Where: n= sample size,

N= the population size, which is

e = level of precision (acceptable error) and its value is 0.05

$$n=\frac{N}{1+N(e^2)}$$

$$n=\frac{380}{1+380(0,05)^2}$$

n= 196 .87

Therefore, the sample size for simple random sampling technique is approximately 196.87. We can round this up to 197 to ensure a representative sample.

3.2.3 Sampling Technique

The study utilized a combination of probability and non-probability sampling strategies to ensure both representativeness and practicality in gathering data from the diverse workforce at GIW. In the realm of probability sampling, specifically simple random sampling, every member of the population, encompassing all 197 employees, had an equal chance of being included in the sample. This method guaranteed a representative and unbiased selection process, providing an accurate reflection of the entire employee population at GIW. On the other hand, non-probability sampling, specifically purposive sampling method, was used to conduct interviews with process owners and top managers. While this method offered practicality in data collection, it may have introduced some level of bias due to the non-random selection of participants. The inclusion criteria for the study encompassed all employees of GIW, with a specific focus on process owners and top managers who were targeted for interviews. This inclusive approach ensured that insights were gathered from a broad spectrum of perspectives within the organization, enriching the comprehensiveness of the study. The data collection process involved the lead researcher conducting interviews with various stakeholders, including process owners, senior managers, production supervisors, and non-managerial staff. Additionally, a self-administered questionnaire

was distributed to every employee, facilitating comprehensive feedback from the entire workforce. The offices of process owners and senior managers served as the venues for interviews, and providing a conducive environment for gathering valuable insights.

3.4. Data Sources & Data Collection Method:

Both primary and secondary data sources were used in this study to ensure a comprehensive understanding of the dynamics between determining factors and creative work behavior. Primary data was gathered using questionnaires and interviews, while secondary data was obtained from books, journal articles, and organizational records.

Quantitative Data Sources: Structured surveys served as the primary source of quantitative data. These surveys were distributed to all 197 employees, including process owners, senior managers, production supervisors, and non-managerial staff across all departments. The surveys included standardized questions designed to measure variables related to motivation and creative work behavior. The quantitative data obtained from these surveys enabled statistical analyses to identify patterns, correlations, and trends.

Qualitative Data Sources: Interviews constituted the primary sources of qualitative data. The researcher conducted interviews with key stakeholders, including process owners, senior managers, and other staff. These interviews delved into nuanced aspects of motivation and creative work behavior, capturing insights that may not be easily quantifiable.

Data Collection Process:

Surveys: The structured surveys were distributed to all employees, and participants were given adequate time to complete them. Clear instructions and explanations of the survey's purpose were provided to ensure accurate and meaningful responses.

Interviews: The lead researcher conducted in interviews with process owners, senior managers, and other relevant staff. The interviews were semi-structured, allowing for a balance between predefined questions and the exploration of unanticipated insights. These one-on-one sessions took place in the offices of the interviewees.

3.5. Reliability and validity of data collection instruments

Ensuring the reliability and validity of data collection instruments was crucial for maintaining the integrity and trustworthiness of the study on the Effect of Motivation on Employee Creative Work Behavior at Geosynthetics Industrial Works Plc (GIW).

For the quantitative data collection instrument (structured surveys), reliability was ensured internal consistency (Cronbach's Alpha). Internal consistency was assessed using Cronbach's Alpha to evaluate the consistency of items within each section of the survey.

Validity for the surveys was established through content validity and construct validity. Content validity was ensured through a thorough review by experts in the field to confirm that the questions adequately captured the dimensions of motivation and creative work behavior. Construct validity was examined using factor analysis to confirm that the survey items measured the intended constructs.

For the qualitative data collection instruments in interviews , reliability was maintained through inter-rater reliability and consistency in the moderator's approach. Inter-rater reliability was assessed to ensure consistency in coding and interpretation of qualitative data, and the lead researcher's approach was consistent across focus group discussions.

Validity for the qualitative data collection instruments was established through credibility, transferability; confirmability, and prolonged engagement. Steps were taken to establish credibility, such as member-checking where participants reviewed transcripts to confirm accuracy. Detailed descriptions of the research context, participants, and procedures were provided to enhance the transferability of findings to similar settings. Confirmability was ensured by keeping an audit trail of the research process, and prolonged engagement in the research setting contributed to a deeper understanding of the context, enhancing the validity of interpretations.

Overall, the study employed both quantitative and qualitative methods to ensure triangulation, where findings from different sources were compared to strengthen the overall validity.

Table 1 Reliability of data collection instruments

Variables	No. of Items	Reliability Coefficient (Cronbach's Alpha)	Scale Developer(s) and Year
Job Autonomy	8	0.82	Oldham & Cummings, 1996
Perceived Work Significance	10	0.78	Wrzesniewski et al., 1997
Work Difficulty	5	0.75	Amabile, 1996
Supervisory Support	9	0.83	Amabile et al., 2004
Psychological Safety	6	0.79	Carmeli et al., 2010
Creative Work Behavior	15	0.87	Amabile, 1988

The variables were measured using established scales developed by various researchers. Job autonomy, as conceptualized by (Cummings, Oldham &, 1996), was assessed with 8 items and demonstrated good reliability ($\alpha = 0.82$). Perceived work significance, based on the scale developed by (Wrzesniewski et al., 1997), consisted of 10 items with a reliability coefficient of 0.78.

Work difficulty, a construct derived from (Amabile, 1996), was measured using 5 items and showed acceptable reliability ($\alpha = 0.75$).

Supervisory support, as defined by (Amabile et al., 2024), was assessed with 9 items and demonstrated high reliability ($\alpha = 0.83$). Psychological safety, based on the scale developed by Carmeli et al. (2010), consisted of 6 items with a reliability coefficient of 0.79.

Overall, these measures provided reliable assessments of the respective constructs, allowing for robust analysis and interpretation of the relationships between variables in the study.

3.6. Methods of data analyses

3.6.1 Quantitative Data Analysis

The quantitative data obtained from structured surveys underwent statistical analysis to identify patterns, correlations, and trends related to motivation and creative work behavior. This analysis involved:

Descriptive Statistics: Measures such as mean, median, mode, standard deviation, and variance were calculated to summarize the main features of the data.

Inferential Statistics: Techniques such as correlation analysis (Pearson correlation) and multiple linear regression analysis were employed to examine relationships between variables and make inferences about the population from the sample data.

3.6.2 Qualitative Data Analysis

The qualitative data collected from interviews underwent summarized and condensed form.

Interpretation: Meaningful insights and interpretations were extracted from the qualitative data to understand the nuances of motivation and creative work behavior.

3.6.3 Triangulation

The study employed triangulation, where findings from both quantitative and qualitative data sources were compared and integrated to strengthen the overall validity of the study. Triangulation allowed for a comprehensive and nuanced understanding of the relationship between motivation and creative work behavior at GIW. By rigorously addressing reliability and validity in the data collection instruments and employing a mixed-methods approach, the study aimed to enhance the robustness and credibility of its findings, providing a solid foundation for understanding the intricate relationship between motivation and creative work behavior at GIW.

The research approach and design, population, sample size, sampling process, data sources, data collection method, and methods of data analysis were meticulously crafted to achieve a comprehensive understanding of the dynamics between motivation and creative work behavior at GIW.

The combination of quantitative and qualitative data sources, along with a rigorous approach to data analysis, contributed to a comprehensive and insightful exploration of the effect of motivation on employee creative work behavior at GIW.

3.7. Ethical considerations

The research will adhere to ethical standards, ensuring informed consent, confidentiality, and anonymity for participants. Approval from relevant ethical review boards will be obtained before initiating data collection. By adopting this robust research approach and design, the study aims to contribute valuable insights into the motivational drivers shaping creative work behavior at GIW, facilitating the development of strategies to enhance overall organizational performance and innovation.

Chapter Four: Data Presentation and Analysis

4.1 Introduction

This study aimed to investigate the Geosynthetics Industrial Works Plc (GIW) employee creative work behavior and the factors affecting it. As a result, this chapter reported and evaluated the study's findings. The respondents' initial demographic information was shown. These data included demographic information and general facts about employee creative work behavior. The questionnaire was designed using five point interval scales, with values ranging from strongly disagree (1) to strongly agree (5). 198 questionnaires were distributed to the GIW employees, and 192 of them were duly completed and returned. The SPSS version 26 software was used to process survey data. The degrees of the link between the various variables under consideration were analyzed using correlation analysis. Additionally, regression analysis was utilized to examine the effect of independent variables on the dependent variable (employee creative behavior.

4.2 Demographic characteristics of survey respondents

Survey respondents were asked to provide information about their demographic profile such as sex, age, level of education and organizational tenure. Detail about the demographic information is presented below.

Table 2: Demographic Profile of Respondents in Geosynthetics Industrial Works Plc (GIW)

Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	132	68.8	68.8	68.8
	Female	60	31.3	31.3	100.0
	Total	192	100.0	100.0	
age group					
Valid	18-25	30	15.6	15.6	15.6
	32-40	24	12.5	12.5	28.1
	32-40	72	37.5	37.5	65.6
	above 40	66	34.4	34.4	100.0
	Total	192	100.0	100.0	
current Educational Qualification					
Valid	Diploma	12	6.3	6.3	6.3
	Degree	120	62.5	62.5	68.8
	Masters	60	31.3	31.3	100.0
	Total	192	100.0	100.0	
Service year in the organization					
Valid	Less than 3 years	30	15.6	15.6	15.6
	3 to 5 years	12	6.3	6.3	21.9
	6 to 8 years	30	15.6	15.6	37.5
	more than 8 years	120	62.5	62.5	100.0
	Total	192	100.0	100.0	

Source: Survey Result 2024

The survey conducted at Geosynthetics Industrial Works Plc (GIW) gathered demographic information from 192 respondents, focusing on gender, age, education level, and organizational tenure. The gender distribution shows a higher proportion of male respondents, with nearly 69% of the survey participants being male. This suggests a male-dominated workforce within GIW, which could have implications for gender-specific policies and initiatives to promote diversity

and inclusivity in the organization. Increasing gender diversity and supporting female employees might involve targeted recruitment, development programs, and creating an inclusive workplace culture that encourages and supports women.

The age distribution indicates that the majority of the respondents fall within the age ranges of 32-40 (37.5%) and above 40 (34.4%). This suggests a relatively experienced and mature workforce, implying a stable employment environment. However, it also highlights the need for succession planning and potential age-related training programs to ensure knowledge transfer and sustained organizational growth. Implementing strategies for knowledge transfer, mentoring programs, and preparing for potential retirements is crucial. Balancing the workforce with younger talent can ensure long-term sustainability and innovation.

The educational profile reveals that a significant portion of the workforce holds a degree (62.5%), with an additional 31.3% possessing a master's degree. This high level of educational attainment reflects positively on the intellectual capital of GIW and suggests that employees are well-equipped to engage in complex problem-solving and innovative tasks. Leveraging this intellectual capital through advanced training programs, research and development initiatives, and encouraging further education can be beneficial. Continuous professional development should be a priority to maintain a competitive edge and foster innovation.

The tenure data indicates that a substantial majority of respondents (62.5%) have been with GIW for more than 8 years, suggesting strong employee retention and loyalty. This can be advantageous for maintaining organizational knowledge and stability. However, it also underscores the importance of addressing potential issues related to employee motivation and career progression to prevent stagnation and to keep the workforce engaged and productive. Addressing career development and progression opportunities can help maintain engagement and prevent skill obsolescence. Succession planning and career pathing are essential to keep long-serving employees motivated and productive.

By strategically addressing these demographic insights, GIW can enhance its workforce management practices, foster a more inclusive and dynamic work environment, and ultimately drive organizational success through improved employee engagement and creativity.

4.3 Descriptive Analysis

4.3.1 Descriptive statistics for job autonomy

Table 3: Descriptive statistics for job autonomy:

	Descriptive statistics for job autonomy at GIW			
No		N	Mean	Std. Deviation
1	In this organization, I feel empowered to make independent decisions about how I approach my work, including methods, processes, and scheduling	192	3.41	1.224
2	In this organization, I feel that having autonomy and flexibility contribute to my creative problem-solving and exploration of new ideas.	192	3.56	1.174
3	In this organization, I feel that the ability to experiment with different approaches, without constant supervision, facilitates my sense of ownership and motivation towards creative projects	192	3.19	1.239
4	There are specific areas where I would wish for more autonomy to boost My creative potential.	192	3.47	1.002
5	Overall, The job autonomy has helped me to develop creative expression and innovation at GIW	192	3.34	1.192
	Aggregate	192	3.34	

Source: Survey Result 2024

The descriptive statistics for job autonomy at Geosynthetics Industrial Works Plc (GIW) provide insight into how employees perceive their autonomy and its impact on their work. The survey results reveal that, on average, employees feel moderately empowered to make independent decisions about their work methods, processes, and scheduling, with a mean score of 3.41 and a standard deviation of 1.224. This suggests that while there is some level of autonomy, there may be room for improvement in empowering employees to take full control of their work.

Employees also recognize the value of autonomy in enhancing their creative problem-solving and exploration of new ideas, with a slightly higher mean score of 3.56 and a standard deviation of 1.174. This indicates that flexibility in the workplace is perceived positively, contributing to employees' ability to innovate. However, the ability to experiment with different approaches without constant supervision received a mean score of 3.19 and a standard deviation of 1.239, indicating that employees may feel somewhat restricted in this aspect. Increasing opportunities for experimentation could potentially boost their sense of ownership and motivation towards creative projects.

There is a noticeable desire for more autonomy in specific areas to boost creative potential, reflected in a mean score of 3.47 and a standard deviation of 1.002. This suggests that employees believe that additional autonomy could further enhance their creative capabilities. Overall, job autonomy at GIW has a mean score of 3.34 with a standard deviation of 1.192, indicating that while job autonomy is present and somewhat beneficial, there is still significant room for improvement in facilitating creative expression and innovation.

These findings align with existing literature, which emphasizes the importance of job autonomy in fostering creativity and innovation. Research consistently shows that employees who have more control over their work are more likely to be engaged, motivated, and innovative. For instance, studies have found that job autonomy is positively correlated with job satisfaction, organizational commitment, and creative performance. By enhancing job autonomy, organizations can create a more dynamic and innovative work environment.

In light of these insights, GIW should consider implementing strategies to increase job autonomy where possible. This could involve providing employees with more flexibility in how they approach their tasks, encouraging experimentation, and reducing unnecessary supervision. Such measures could lead to higher levels of creativity and innovation, ultimately contributing to the organization's success. Addressing the areas where employees wish for more autonomy could also improve their overall job satisfaction and engagement, leading to a more motivated and productive workforce.

4.3.2 Descriptive statistics for Perceived Work Significance at GIW

Table 4: Descriptive statistics for Perceived Work Significance at GIW:

	Descriptive statistics for Perceived Work Significance at GIW			
No	Items	N	Mean	Std. Deviation
1	I feel that my work at GIW aligns with my values and contributes meaningfully to the organization's goals	192	3.94	.902
2	I perceive that my contributions are valued by colleagues and supervisors	192	3.56	1.147
3	In this organization, I find the tasks and projects assigned to me are clear, meaningful, and engaging enough to spark creative problem-solving.	192	3.63	.963
4	My supervisor's feedbacks effectively connect my work to the bigger picture and reinforce its significance.	192	3.66	.990
5	In this organization, I experience a sense of personal fulfillment when engaging in creative activities at work.	192	3.81	.985
6	Overall, I would say that the meaningfulness of my work at GIW motivates I to be more creative and innovative	192	4.06	.936
	Aggregate	192	3.77	

Source: Survey Result 2024

The descriptive statistics for perceived work significance at Geosynthetics Industrial Works Plc (GIW) reveal important insights into how employees view the meaningfulness and impact of their work. The overall aggregate mean score of 3.77 indicates that employees generally feel that their work at GIW is meaningful and contributes significantly to both personal and organizational goals.

The highest mean score of 4.06, with a standard deviation of 0.936, reflects that employees strongly believe that the meaningfulness of their work at GIW motivates them to be more creative and innovative. This high score suggests that when employees perceive their work as meaningful, it enhances their drive to engage in creative activities and innovation. This finding is

consistent with existing literature, which posits that meaningful work is a critical factor in fostering creativity and innovation. When employees find purpose in their work, they are more likely to go above and beyond in their roles.

The item concerning alignment with personal values and contribution to organizational goals also received a high mean score of 3.94 (standard deviation 0.902). This suggests that employees feel a strong connection between their work and their personal values, as well as the organization's objectives. This alignment is crucial as it can lead to higher job satisfaction and organizational commitment, as supported by various studies.

Employees perceive that their contributions are valued by colleagues and supervisors, with a mean score of 3.56 and a standard deviation of 1.147. Although this score is relatively high, the wider standard deviation indicates some variability in responses, suggesting that while many employees feel valued, there are others who may feel less appreciated. Enhancing recognition and appreciation mechanisms within the organization could address this discrepancy and ensure that all employees feel valued.

Tasks and projects at GIW are seen as clear, meaningful, and engaging, sparking creative problem-solving, with a mean score of 3.63 and a standard deviation of 0.963. This indicates that the organization generally provides assignments that are engaging and conducive to creativity. However, continuous efforts to ensure that all tasks are consistently meaningful and engaging could further enhance this perception.

Feedback from supervisors effectively connects individual work to the broader organizational picture, with a mean score of 3.66 and a standard deviation of 0.990. This suggests that supervisory feedback is generally effective in reinforcing the significance of employees' work, which is crucial for maintaining motivation and a sense of purpose. Effective feedback is well-documented in the literature as a key factor in employee development and motivation.

Finally, a mean score of 3.81 and a standard deviation of 0.985 indicate that employees experience personal fulfillment when engaging in creative activities at work. This sense of fulfillment is vital for maintaining high levels of employee engagement and creativity, aligning with research that emphasizes the importance of intrinsic motivation in creative performance.

In light of these findings, GIW can further enhance perceived work significance by maintaining and strengthening alignment between employees' work and their values, increasing recognition and appreciation efforts, ensuring tasks remain engaging, and continuing to provide effective feedback that connects individual contributions to the organization's goals. These strategies can help sustain a motivated, creative, and innovative workforce, driving organizational success.

4.3.3 Descriptive statistics for work difficulty at GIW

Table 5: Descriptive statistics for work difficulty at GIW

Descriptive statistics for work difficulty at GIW				
No	Items	N	Mean	Std. Deviation
1	I feel that the challenging tasks at GIW stimulate my creative thinking and lead to more innovative solutions	192	3.75	1.121
2	I believe that the difficulty of my work assignments encouraged me to explore unconventional approaches and solutions.	192	3.69	1.105
3	I feel that tackling complex problems at GIW motivate me to engage in creative work behavior more often	192	3.75	1.063
4	There are specific types of difficult tasks that spark my creativity the most.	192	3.47	.970
5	Overall, I believe that challenging work has boosted my creative expression and innovation at GIW.	192	3.56	1.200
	Aggregate	192	3.64	

Source: Survey Result 2024

The descriptive statistics for work difficulty at Geosynthetics Industrial Works Plc (GIW) provide valuable insights into how challenging tasks impact employees' creativity and innovation. The overall aggregate mean score of 3.64 indicates a generally positive perception of work difficulty, suggesting that employees find challenging tasks beneficial for stimulating creative thinking and innovative solutions.

The highest mean scores of 3.75, with standard deviations of 1.121 and 1.063 respectively, indicate that employees feel the challenging tasks at GIW stimulate their creative thinking and motivate them to engage in creative work behavior. These findings align with existing literature, which suggests that challenging work can be a significant driver of creativity and innovation. When employees face complex problems, they are often pushed to think outside the box and develop novel solutions, enhancing their creative capabilities.

The mean score of 3.69 (standard deviation 1.105) for the belief that work difficulty encourages the exploration of unconventional approaches and solutions supports the idea that challenging assignments foster a more innovative mindset. This reflects theories in organizational behavior that emphasize the importance of task complexity in promoting creative problem-solving.

The item regarding specific types of difficult tasks sparking creativity received a mean score of 3.47 and a standard deviation of 0.970. While this score is slightly lower than the others, it still indicates a positive perception. However, it suggests there might be variability in the types of tasks that different employees find creatively stimulating. Customizing task assignments to better match individual preferences and strengths could further enhance creative output.

The mean score of 3.56 (standard deviation 1.200) for the overall belief that challenging work boosts creative expression and innovation suggests that while many employees feel positively about the impact of work difficulty, there is some variability in responses. This variability might indicate differences in how employees cope with and perceive challenges. Providing additional support and resources to help employees manage difficult tasks could help standardize positive perceptions across the workforce.

These findings are consistent with the literature, which highlights that while challenging tasks can promote creativity, the right balance of support and autonomy is crucial. Overly challenging tasks without adequate support can lead to stress and burnout, while appropriately challenging tasks with sufficient resources and autonomy can enhance creative performance and job satisfaction.

In summary, the data suggests that challenging tasks at GIW generally promote creative thinking and innovative solutions among employees. To capitalize on this, GIW should continue to provide challenging work while ensuring employees have the necessary support and resources to

tackle these tasks effectively. By doing so, the organization can foster a more innovative and creative work environment, leading to greater overall success and employee satisfaction.

4.3.4 Descriptive statistics for supervisory support at GIW

Table 6: Descriptive statistics for supervisory support at GIW

Descriptive statistics for supervisory support at GIW				
No	Items	N	Mean	Std. Deviation
1	In this organization, my supervisor provides me with constructive feedback that helps me improve creative work.	192	3.56	1.119
2	my feel encouraged and supported by my supervisor in exploring new ideas and approaches to your work	192	3.34	1.165
3	In this organization, my supervisor recognizes and appreciates my creative contributions.	192	3.41	1.117
4	In this organization, I feel comfortable discussing my creative challenges and ideas with my supervisor.	192	3.43	1.196
5	In this organization, my supervisor fosters a supportive environment that encourages experimentation and risk-taking in creative work.	192	3.44	1.200
6	Overall, I feel that supervisory support Has enhanced my creative work behavior at GIW.	192	3.49	1.162
	Aggregate	192	3.45	

Source: Survey Result 2024

The descriptive statistics for supervisory support at Geosynthetics Industrial Works Plc (GIW) reveal a generally positive perception among employees regarding the support they receive from their supervisors. With an overall aggregate mean score of 3.45, it is evident that employees feel moderately supported by their supervisors in their creative endeavors.

The item "In this organization, my supervisor provides me with constructive feedback that helps me improve creative work" received a mean score of 3.56 with a standard deviation of 1.119.

This indicates that employees appreciate the feedback they receive from their supervisors, which helps them enhance their creative work. Constructive feedback is crucial for continuous improvement and aligns with the literature, which emphasizes the importance of feedback in fostering a culture of creativity and innovation.

The mean score of 3.34 (standard deviation 1.165) for the feeling of encouragement and support from supervisors in exploring new ideas suggests a slightly lower but still positive perception. While employees feel encouraged to explore new ideas, there might be room for improvement in how supervisors actively promote and support innovation. The literature supports the notion that supervisory encouragement is vital for creative performance, as it provides the psychological safety needed for employees to take risks and experiment.

Recognition and appreciation of creative contributions by supervisors scored a mean of 3.41 with a standard deviation of 1.117. Employees feel their creative efforts are acknowledged, which is essential for maintaining motivation and engagement. Recognition has been widely recognized in the literature as a key driver of employee creativity and job satisfaction.

The comfort level in discussing creative challenges and ideas with supervisors received a mean score of 3.43 (standard deviation 1.196). This indicates that employees feel relatively comfortable approaching their supervisors with creative ideas and issues, which is important for fostering an open and collaborative work environment. The literature highlights that open communication channels between employees and supervisors are critical for promoting innovation and addressing creative challenges effectively.

The item regarding supervisors fostering a supportive environment that encourages experimentation and risk-taking in creative work received a mean score of 3.44 (standard deviation 1.200). This suggests that supervisors at GIW generally create an environment conducive to creative experimentation. The literature supports this finding, emphasizing that a supportive environment is essential for employees to feel safe in taking creative risks and trying out new ideas.

Overall, the perception that supervisory support has enhanced creative work behavior at GIW received a mean score of 3.49 with a standard deviation of 1.162. This reflects a positive view of

supervisory support, indicating that employees believe their supervisors play a significant role in enhancing their creative performance.

The findings are consistent with the literature, which underscores the importance of supervisory support in fostering a creative and innovative workplace. Effective supervisory support involves providing constructive feedback, encouraging new ideas, recognizing creative contributions, fostering open communication, and creating a supportive environment for experimentation and risk-taking. By continuing to strengthen these aspects, GIW can further enhance its employees' creative work behavior, leading to increased innovation and organizational success.

4.3.5 Descriptive statistics for psychological safety at GIW

Table 7: Descriptive statistics for psychological safety at GIW

	Descriptive statistics for psychological safety at GIW			
No	Items	N	Mean	Std. Deviation
1	In this organization, I feel comfortable expressing my creative ideas and opinions, even if they differ from the norm, without fear of judgment or negative consequences.	192	3.13	1.087
2	In this organization, the feedback I receive from colleagues and supervisors encourage and support my creative contributions.	192	3.53	1.121
3	In this organization, the organizational culture actively support and promote exploration of innovative solutions.	192	3.31	1.047
4	In this organization, I feel confident that my team values diverse perspectives and is open to learning from failures without criticism.	192	3.41	1.089
5	The overall atmosphere at GIW promotes open communication and collaboration, fostering creative work behavior.	192	3.49	1.270
6	Overall, I would say that the psychological safety has enabled me to be creative and take risks at GIW.	192	3.41	1.089
	Aggregate	192	3.38	

Source: Survey Result 2024

The descriptive statistics for psychological safety at Geosynthetics Industrial Works Plc (GIW) reveal an overall moderate level of perceived psychological safety among employees, with an aggregate mean score of 3.38. This indicates that, while there is a general sense of safety, there is still room for improvement in fostering an environment where employees feel fully secure in expressing their creative ideas and taking risks.

The item "In this organization, I feel comfortable expressing my creative ideas and opinions, even if they differ from the norm, without fear of judgment or negative consequences" received a mean score of 3.13 with a standard deviation of 1.087. This relatively lower score suggests that some employees may still hesitate to share unconventional ideas due to fear of negative repercussions. The literature emphasizes the importance of psychological safety in enabling employees to voice diverse perspectives and engage in innovative thinking without fear of criticism or judgment.

Feedback from colleagues and supervisors that encourages and supports creative contributions scored a mean of 3.53 with a standard deviation of 1.121. This indicates that feedback at GIW generally promotes creativity, aligning with the literature, which highlights the role of supportive feedback in enhancing psychological safety and fostering a culture of innovation.

The perception that the organizational culture actively supports and promotes the exploration of innovative solutions received a mean score of 3.31 (standard deviation 1.047). This suggests a moderate level of cultural support for innovation, indicating that while there are initiatives in place, there might be opportunities to strengthen the culture further to encourage more widespread exploration of creative solutions. According to the literature, an organizational culture that promotes innovation is crucial for sustaining long-term competitive advantage and fostering employee creativity.

Employees' confidence that their team values diverse perspectives and is open to learning from failures without criticism scored a mean of 3.41 with a standard deviation of 1.089. This suggests that there is a moderate level of acceptance for diverse viewpoints and a learning-oriented approach to failure, which is supported by the literature. A team environment that values diversity and views failures as learning opportunities is critical for promoting psychological safety and encouraging risk-taking.

The overall atmosphere at GIW that promotes open communication and collaboration, fostering creative work behavior, received a mean score of 3.49 (standard deviation 1.270). This indicates a fairly positive perception of the organizational atmosphere, suggesting that GIW has established a reasonably supportive environment for open communication and collaborative innovation. The literature underscores the importance of open communication channels and collaborative cultures in enhancing psychological safety and fostering creativity.

Finally, the overall perception that psychological safety has enabled employees to be creative and take risks at GIW received a mean score of 3.41 with a standard deviation of 1.089. This reflects a moderate level of agreement, indicating that while psychological safety is present to some extent, further efforts may be needed to fully enable employees to feel safe in their creative endeavors.

These findings are consistent with the literature, which emphasizes the importance of psychological safety in fostering creativity and innovation within organizations. Psychological safety allows employees to express their ideas, take risks, and learn from failures without fear of negative consequences. To further enhance psychological safety at GIW, management could focus on strengthening the organizational culture to more actively support innovation, providing more consistent and encouraging feedback, and fostering an environment where diverse perspectives are valued and failures are viewed as opportunities for learning and growth. By addressing these areas, GIW can create a more psychologically safe environment that fully supports and nurtures employee creativity and innovation.

4.3.6. Descriptive statistics for creative work behavior

Table 8: Summary of descriptive statistics for study variables

	Descriptive statistics for creative work behavior			
No	Item	N	Mean	Std. Deviation
1	Job Autonomy at GIW:	192	3.38	1.178
2	Perceived Work Significance and Value at GIW	192	3.74	1.014
3	Work difficulty at GIW:	192	3.72	1.113
5	supervisory support at GIW:	192	3.44	1.151
6	Psychological safety at GIW:	192	3.43	1.124
8	Over all creative work at GIW:	192	3.51	1.139

Source: Survey Result 2024

The descriptive statistics for creative work behavior, as outlined in Table 8, offer a nuanced view of the factors influencing creative work behavior at GIW. The mean scores for each variable, ranging from 3.38 to 3.74, indicate a moderate level of agreement among employees on these aspects of their work environment and experience. This moderate level of agreement reflects a baseline understanding of the conditions that foster or hinder creative work behavior within the organization.

Job autonomy, with a mean score of 3.38, is relatively lower compared to other variables, suggesting that employees may perceive a limited degree of freedom in how they perform their tasks. This limited autonomy might stifle creativity, as employees with more control over their work processes are often better able to explore novel ideas and approaches. On the other hand, perceived work significance and value, with a higher mean score of 3.74, indicates that employees see their work as meaningful and valuable. This perception can be a strong motivator for creative efforts, as employees are more likely to invest effort into work they believe is important.

Work difficulty, scoring 3.72 on average, suggests that employees find their tasks challenging yet manageable. A balance between challenge and skill is crucial for creative work, as overly difficult tasks might lead to frustration, while tasks that are too easy can result in boredom. Supervisory support, with a mean of 3.44, indicates a moderate level of perceived support from supervisors. Supervisory support is essential for fostering a creative environment, as it provides employees with the encouragement and resources they need to explore new ideas.

Psychological safety, with a mean of 3.43, reflects a moderate perception of a safe environment for sharing ideas without fear of negative consequences. Psychological safety is critical for creativity because it allows employees to take risks and propose innovative solutions without fearing criticism or reprisal.

Overall creative work behavior, with a mean score of 3.51, reflects a moderate level of creative engagement among employees. This score integrates the effects of autonomy, perceived significance, work difficulty, supervisory support, and psychological safety on creative behavior.

The moderate scores across these variables suggest that while there are elements in the work environment at GIW that support creativity, there are also areas needing improvement. For

instance, increasing job autonomy might enhance creative work behaviors, as employees would have more freedom to experiment and innovate. Strengthening supervisory support and fostering a more psychologically safe environment could also encourage more creative behaviors.

These findings align with the existing literature on creativity in the workplace. Research consistently shows that job autonomy, perceived significance of work, and a supportive environment are key drivers of creative behavior (Amabile, 1996; Csikszentmihalyi, 1996). The moderate levels of these factors in the current study suggest that while GIW has a foundation for fostering creativity, there is room for growth.

In light of these findings, organizations aiming to enhance creative work behavior should focus on creating a more autonomous work environment, increasing support from supervisors, and ensuring that employees feel their work is significant and valued. These strategies are supported by literature that highlights the importance of these factors in nurturing creativity and innovation (Zhou & George, 2001; Edmonson, 1999).

4.4 Inferential Analysis

4.4.1. Correlation Analysis

Field (2005) asserts that the correlation coefficient is a highly helpful tool for encapsulating the link between two variables in a single value that ranges from -1 to +1. The correlation coefficient is commonly represented by the letter "r". Therefore, a perfect positive relationship (r =+1.00) denotes a direct relationship, and a perfect negative relationship (r =-1.00) denotes the opposite. Therefore, a two-tailed test of statistical significance at the level of 95% significance, $P< 0.05$, was utilized in this study to assess the link between the training process practice and employees' performance.

The correlation coefficient's (r) size might be seen as falling if:

When the correlation is between 0.1 and 0.20, it is slight or small; when it is between 0.20 and 0.40, it is low or weak; when it is between 0.40 and 0.70, it is moderate; when it is between 0.70 and 0.90, it is high or substantial; and when it is between 0.90 and 1.00, it is extremely high or very strong (B.Burns&R.Burns, 2008).

Table 9: Correlation Analysis

Correlations							
		JA at GIW:	PWS at GIW	WD at GIW:	SS at GIW:	PS at GIW:	CW at GIW:
JA at GIW:	Pearson Correlation	1	.245**	.200**	.216**	.437**	.456**
	Sig. (1-tailed)		.000	.003	.001	.000	.000
	N	192	192	192	192	192	192
PWSat GIW	Pearson Correlation	.245**	1	.413**	.499**	.261**	.353**
	Sig. (1-tailed)	.000		.000	.000	.000	.000
	N	192	192	192	192	192	192
WD at GIW:	Pearson Correlation	.200**	.413**	1	.272**	.442**	.539**
	Sig. (1-tailed)	.003	.000		.000	.000	.000
	N	192	192	192	192	192	192
SSat GIW:	Pearson Correlation	.216**	.499**	.272**	1	.122*	.298**
	Sig. (1-tailed)	.001	.000	.000		.046	.000
	N	192	192	192	192	192	192
PS at GIW:	Pearson Correlation	.437**	.261**	.442**	.122*	1	.670**
	Sig. (1-tailed)	.000	.000	.000	.046		.000
	N	192	192	192	192	192	192
CWat GIW:	Pearson Correlation	.456**	.353**	.539**	.298**	.670**	1
	Sig. (1-tailed)	.000	.000	.000	.000	.000	
	N	192	192	192	192	192	192

**. Correlation is significant at the 0.01 level (1-tailed).

*. Correlation is significant at the 0.05 level (1-tailed).

Source: Survey Result 2024

The correlation analysis presented reveals a series of relationships between various work-related variables at GIW, including job autonomy, perceived work significance and value, work difficulty, supervisory support, psychological safety, and overall creative work. This analysis highlights how these variables interact and the potential implications for enhancing creative performance in the workplace.

Job autonomy is positively correlated with overall creative work ($r = 0.456$, $p < 0.01$) and psychological safety ($r = 0.437$, $p < 0.01$). This indicates that greater job autonomy is associated with a higher level of creative output and a stronger sense of psychological safety. This finding is consistent with the literature which emphasizes that job autonomy can empower employees, leading to increased creativity and a more secure work environment. Job autonomy allows employees to exercise control over their work processes, which can foster a sense of ownership and motivate them to engage more deeply in their tasks, thereby enhancing their creative potential (Gagne & Deci, 2005).

Perceived work significance and value shows strong positive correlations with work difficulty ($r = 0.413$, $p < 0.01$) and overall creative work ($r = 0.353$, $p < 0.01$). These relationships suggest that when employees perceive their work as meaningful and valuable, they are more likely to engage with challenging tasks and produce creative outcomes. This aligns with the work of Hackman and Oldham (1976), who argued that employees who find their work significant are more likely to experience job satisfaction and be motivated to tackle difficult tasks, which can ultimately lead to greater creative achievements.

Work difficulty is also positively correlated with overall creative work ($r = 0.539$, $p < 0.01$) and psychological safety ($r = 0.442$, $p < 0.01$). This indicates that challenging work assignments can drive creative output while also contributing to a perception of psychological safety. The finding supports the notion that difficult tasks, when perceived as manageable, can stimulate creativity by pushing employees to explore new ideas and solutions (Amabile, 1996). Additionally, the correlation between work difficulty and psychological safety suggests that employees who view their work challenges as manageable are more likely to feel safe in their work environment, which is crucial for fostering creativity.

Supervisory support has a moderate positive correlation with overall creative work ($r = 0.298$, $p < 0.01$), indicating that support from supervisors contributes to employees' creative performance.

This finding is supported by research indicating that supervisors who provide support and encouragement can enhance employees' creative capacities by offering necessary resources and a supportive environment (Mumford & Gustafson, 1988).

Psychological safety shows a very strong positive correlation with overall creative work ($r = 0.670$, $p < 0.01$). This result underscores the importance of creating a work environment where employees feel safe to take risks and express creative ideas. Psychological safety is a well-established factor in fostering creativity, as it allows individuals to engage in risk-taking and innovative thinking without fear of negative repercussions (Edmondson, 1999).

These findings collectively suggest that fostering job autonomy, providing meaningful work, managing work difficulty, offering supervisory support, and ensuring psychological safety are all crucial elements for enhancing creative work. The strong correlations observed support the view that these factors are interconnected and collectively contribute to a productive and innovative work environment.

In comparing these findings with existing literature, it is evident that the relationships observed are consistent with well-established theories of work motivation and creativity. The positive impact of job autonomy, perceived work significance, and psychological safety on creative work aligns with theories proposed by Deci and Ryan (1985) on self-determination and Amabile (1996) on the componential theory of creativity. The role of work difficulty and supervisory support in fostering creativity also supports previous research findings (Mumford et al., 2002; Amabile, 1996), which suggest that challenging tasks and supportive leadership are key to unlocking creative potential in employees.

In summary, the data suggest that to promote creativity in the workplace, organizations should focus on increasing job autonomy, ensuring that employees find their work significant, managing work difficulty appropriately, providing supervisory support, and fostering an environment of psychological safety. These factors are crucial for developing a creative and innovative workforce, as supported by existing literature on workplace creativity and motivation

4.4.2. Regression Analysis

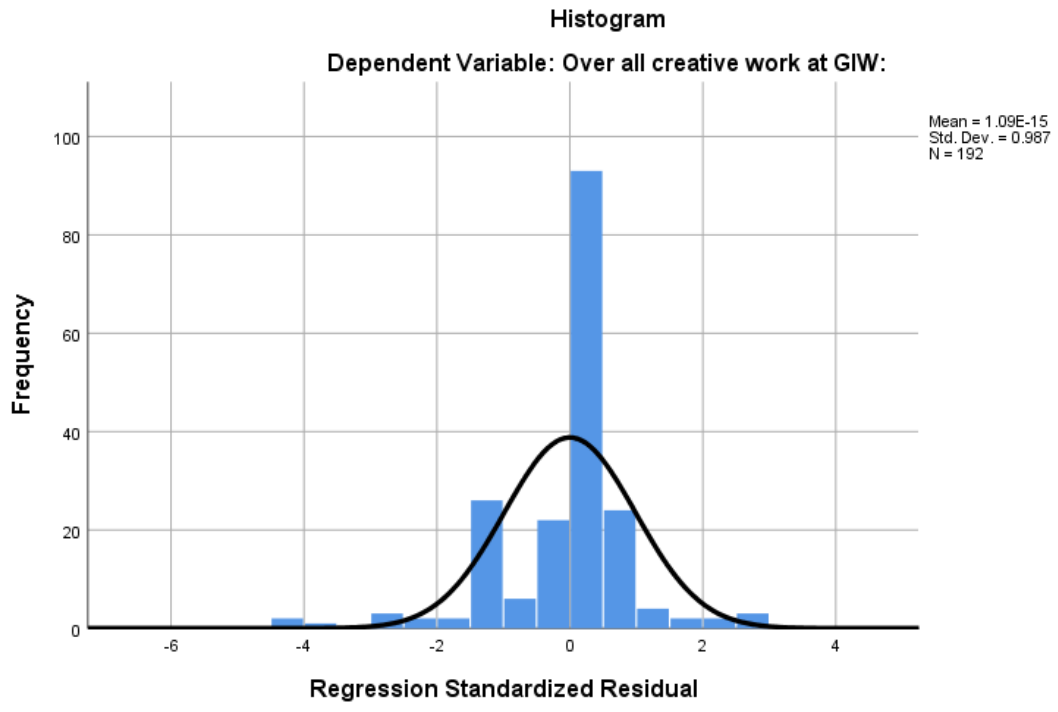
Regression analysis is a way of predicting an outcome variable from one predictor variable (simple regression) or several predictor variables (multiple regressions) (Andy field, 2009).The model of regression shows how much of the variance in the employees' " Creative climate at GIW" is explained by independent variables. The regression model used to examine the predictors of the creative climate at GIW shows that the predictors collectively explain a large portion of the variance in the dependent variable.

4.4.2.1. Assumption tests

Before interpreting regression results, it is essential to ensure that the data fulfill the basic assumptions of classical linear regression analysis. These assumptions are critical for the validity of the regression results, ensuring that the model provides reliable and unbiased estimates. The main assumptions are:

4.4.2.2 Normality test

This test was applied to control whether a data is well-modeled by a normal distribution or not, and to calculate in what way likely an underlying random variable is designate normally distributed. If the residuals are normally distributed, the histogram should be bell-shaped.



Source: researcher’s computation and SPSS 26 output results.

Figure 2; Normality test

The histogram represents the distribution of the regression standardized residuals for the dependent variable "Overall creative work at GW." The residuals are centered around zero, indicating that the regression model fits the data reasonably well. The mean of the residuals is approximately zero (1.09E-15), further supporting the model's adequacy. The standard deviation of 0.987 suggests that most residuals are within one standard deviation of the mean.

The shape of the histogram is approximately bell-curved, indicating a normal distribution of residuals with slight deviations from normality. There is a notable peak around zero, with most residuals clustering near the mean. The histogram also shows a few outliers on both ends, with a slight positive skew indicated by the longer tail on the right side.

The data implies that the regression model used to predict "Overall creative work at GW" is well-calibrated, as evidenced by the residuals' distribution closely approximating a normal distribution centered around zero. This suggests that the model's predictions are generally accurate, with minimal systematic bias.

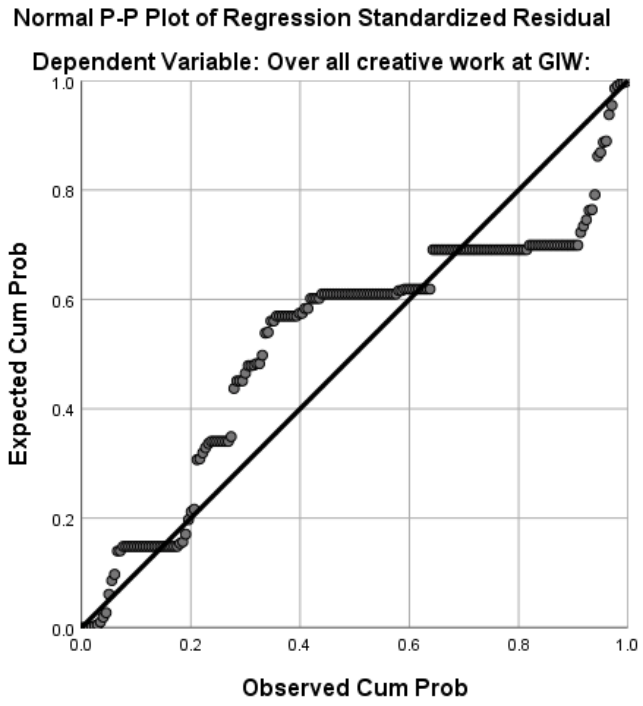
The clustering of residuals around zero with minimal dispersion indicates that the model's predictions are mostly accurate, enhancing confidence in its utility for predicting creative work outcomes. Given the normal distribution of residuals, we can infer that the model's error terms are random and not influenced by external factors, enhancing the reliability of the model's predictions.

The presence of some outliers suggests areas where the model could be improved. Investigating these outliers might reveal specific conditions or variables that are not currently accounted for, providing opportunities to refine the model further. For stakeholders at GW, the model's robustness suggests that it can be used effectively for planning and decision-making related to creative work. However, attention should be given to outliers to ensure comprehensive understanding and continuous improvement.

In summary, the regression model for predicting overall creative work at GW is largely effective, with the residuals' distribution confirming the model's adequacy and reliability. Minor deviations

and outliers highlight areas for potential refinement, ensuring the model remains a valuable tool for stakeholders.

4.2.3 Linearity test



Source: researcher's computation and SPSS 26 output results.

Figure 3; Linearity test

The normal P-P plot of regression standardized residuals for the dependent variable "Overall creative work at GW" compares the observed cumulative probabilities of the residuals with the expected cumulative probabilities under a normal distribution. The points on the plot closely follow the diagonal line, which represents a perfect normal distribution. This alignment suggests that the residuals are approximately normally distributed.

There are some deviations from the diagonal line, particularly at the lower and upper ends, indicating slight deviations from normality. However, these deviations are minimal and do not

significantly detract from the overall conclusion that the residuals are normally distributed. The close fit to the diagonal line supports the validity of the regression model.

The implications of these findings are that the regression model used to predict "Overall creative work at GW" is appropriate and well-calibrated. The normal distribution of residuals indicates that the model's assumptions are largely met, enhancing confidence in its predictive accuracy. The minor deviations at the extremes suggest there may be some non-normality in the tails, but this is not enough to undermine the overall reliability of the model.

For stakeholders, this means that the model can be trusted for planning and decision-making purposes related to creative work at GW. The model's robustness, as indicated by the normal distribution of residuals, ensures that predictions are generally accurate and reliable. However, attention should still be given to the slight deviations at the extremes to identify any potential areas for improvement and to ensure comprehensive understanding and continuous enhancement of the model.

4.4.2.4 No Multicollinearity test

Table 10: Collinearity Statistics

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Job Autonomy at GIW:	.776	1.289
	Perceived Work Significance and Value at GIW	.656	1.524
	Work difficulty at GIW:	.701	1.428
	supervisory support at GIW:	.732	1.366
	Psychological safety at GIW:	.672	1.488
a. Dependent Variable: Over all creative work at GIW:			

In analyzing the multicollinearity statistics for the model assessing overall creative work at GIW, we observe that all variables show tolerance values greater than 0.1 and variance inflation factors (VIF) below 2.0. These findings indicate that multicollinearity is not a significant concern in this model. Specifically, the tolerance values range from 0.656 to 0.776, and the corresponding VIF values range from 1.289 to 1.524.

These statistics suggest that there is no substantial overlap between the predictor variables in the model, which is crucial for ensuring the reliability of the regression coefficients. Low VIF values indicate that the predictors are not highly correlated with one another, thus confirming that each variable independently contributes to explaining the variance in the dependent variable, which in this case is overall creative work at GIW.

The absence of multicollinearity means that the relationships observed between the predictors and the outcome are likely to be valid and interpretable. Each predictor, including job autonomy, perceived work significance, work difficulty, supervisory support, and psychological safety, can be considered to have an independent effect on creative work. This enhances the robustness of the regression analysis and supports the validity of conclusions drawn from the model.

From a practical standpoint, the absence of multicollinearity in this model suggests that the intervention strategies or managerial practices being examined can be individually targeted without concern that their impacts will be confounded by one another. For instance, enhancing job autonomy or improving supervisory support can be evaluated as distinct approaches to boosting creative work, based on the unique contributions each factor makes.

In summary, the multicollinearity diagnostics reveal that the model is well-constructed for examining the effects of various workplace factors on creative work. This solid foundation allows for meaningful interpretations of how job autonomy, perceived work significance, work difficulty, supervisory support, and psychological safety each influence creative outcomes in the workplace.

4.4.2.5 Homoscedasticity test

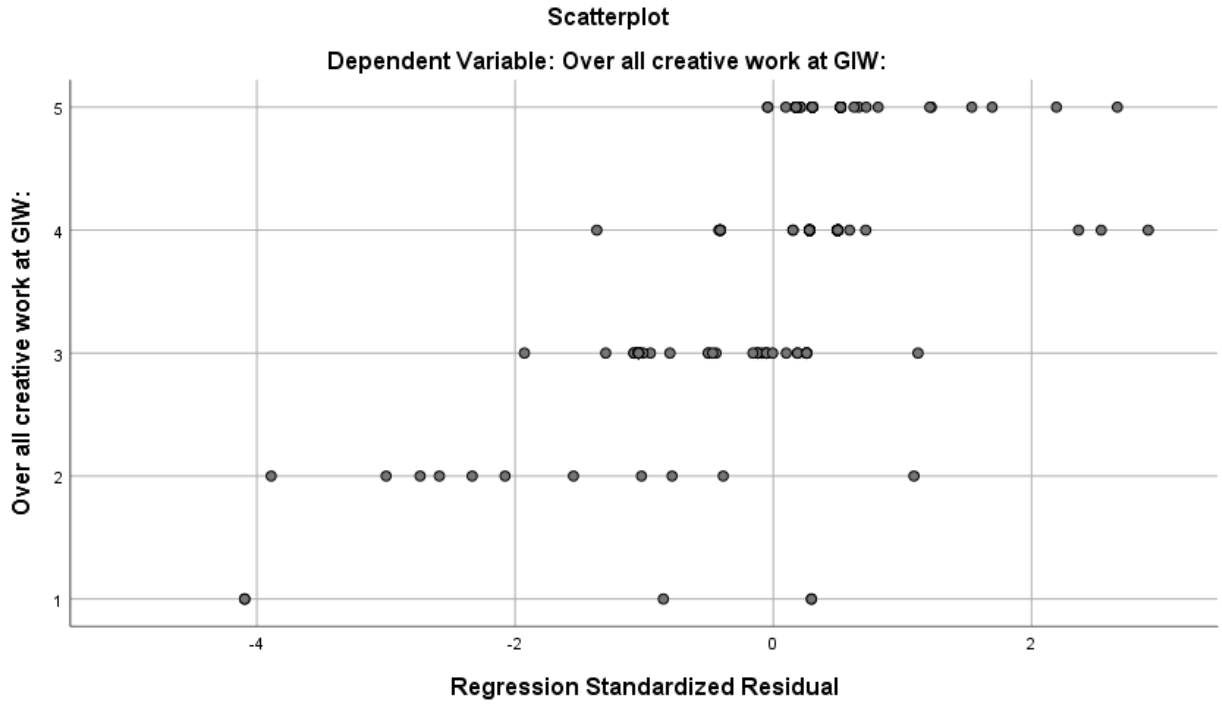


Figure 4: Homoscedasticity test

The scatterplot shows the relationship between the regressions standardized residuals and the dependent variable "Overall creative work at GW." The points are distributed across the range of residuals, indicating how the residuals vary with different levels of creative work. The vertical spread of points at each level of creative work suggests variability in the residuals, which is expected in regression analysis.

The plot does not show any clear patterns or systematic structure, which is a positive indication. The absence of patterns suggests that the residuals are randomly distributed and do not exhibit heteroscedasticity or non-linearity. This randomness supports the assumption that the regression model's residuals are independent and identically distributed, reinforcing the model's validity.

The implications of these findings are that the regression model used for predicting "Overall creative work at GW" is appropriate and reliable. The random distribution of residuals implies

that the model does not suffer from significant issues like heteroscedasticity or non-linearity, enhancing confidence in its predictive power. The variability in residuals across different levels of creative work suggests that the model captures most of the variability in the data, though some unexplained variability remains.

For stakeholders, this means that the model can be trusted for planning and decision-making related to creative work at GW. The model's robustness, indicated by the random distribution of residuals, ensures that its predictions are generally accurate and unbiased. However, ongoing monitoring and potential refinement may be needed to address any unexplained variability and ensure continuous improvement of the model's accuracy and reliability.

4.4.2.6 No autocorrelation

Table 12: No autocorrelation

Model	Change Statistics	Durbin-Watson
	Sig. F Change	
1	.000	1.858
a. Predictors: (Constant), Psychological safety at GIW:, supervisory support at GIW:, Job Autonomy at GIW:, Work difficulty at GIW:, Perceived Work Significance and Value at GIW		
b. Dependent Variable: Over all creative work at GIW:		

Source: researcher's computation and SPSS 26 output results.

The Durbin-Watson statistic for the regression model assessing factors influencing creative work behavior at GIW is reported as 1.858. This statistic is used to detect the presence of autocorrelation in the residuals of a regression analysis, where autocorrelation indicates that the residuals from one observation are correlated with residuals from another, potentially skewing the model's findings.

A Durbin-Watson statistic value of 1.858 is within the acceptable range for suggesting the absence of significant autocorrelation. Typically, a value close to 2 indicates that there is no autocorrelation. Values significantly below 2 suggest positive autocorrelation, while values significantly above 2 suggest negative autocorrelation. Therefore, a Durbin-Watson statistic of 1.858 indicates that there is no substantial autocorrelation present in the residuals of the model.

The implication of this finding is crucial for the reliability and validity of the regression analysis. Since the Durbin-Watson statistic is close to 2, it confirms that the assumption of independence of residuals has not been violated. This is important because the presence of autocorrelation can lead to inefficient estimates and affect the validity of statistical tests for the coefficients. In this case, the results of the regression analysis can be trusted to reflect the true relationships between job autonomy, perceived work significance, work difficulty, supervisory support, psychological safety, and overall creative work behavior.

In light of the literature, the findings from the Durbin-Watson test align with the standards for regression analysis as outlined by authors such as Hair et al. (2010) and Field (2013). Both sources emphasize that a Durbin-Watson statistic around 2 supports the assumption that residuals are uncorrelated, which is fundamental for valid hypothesis testing in regression models.

For example, Hair et al. (2010) explain that the Durbin-Watson test is a diagnostic tool used to assess the presence of autocorrelation and that values near 2 are generally acceptable for regression analyses. Similarly, Field (2013) notes that maintaining this assumption helps ensure that the regression results are valid and that the model's predictions are reliable.

Therefore, the result of the Durbin-Watson test not only validates the current model but also strengthens the conclusions drawn about how job autonomy, perceived work significance, work difficulty, supervisory support, and psychological safety influence creative work behavior at GIW. It confirms that the model's residuals do not exhibit patterns that would distort the statistical tests and interpretations made from the regression analysis.

4.4.3 Regression results

Table 13 model of regression

Model Summary[b]										
				Std.	Change Statistics					
Model	R	R Square	Adjusted R Square	Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.755[a]	.570	.559	.648	.570	49.402	5	186	.000	1.858

a. Predictors: (Constant), Psychological safety at GIW:, supervisory support at GIW:, Job Autonomy at GIW:, Work difficulty at GIW:, Perceived Work Significance and Value at GIW

b. Dependent Variable: Over all creative work at GIW:

Source: researcher's computation and SPSS 26 output results.

The model summary presented in the table indicates that the regression model is statistically significant and explains a substantial proportion of the variance in the dependent variable, Overall Creative Work at GIW.

The R-squared value of 0.570 suggests that the five predictor variables (Job Autonomy, Perceived Work Significance and Value, Work Difficulty, Supervisory Support, and Psychological Safety at GIW) collectively account for 57% of the variation in the overall creative work outcome. The adjusted R-squared value of 0.559 further confirms that the model has good explanatory power, even after accounting for the number of predictors in the model.

The F-change statistic of 49.402 with a p-value less than 0.001 indicates that the addition of the five predictors significantly improves the model's ability to explain the variation in the dependent variable, compared to a model with no predictors.

The Durbin-Watson statistic of 1.858 suggests that there is no significant autocorrelation in the residuals, which is an important assumption for the validity of the regression analysis.

Overall, the model summary provides strong evidence that the five predictor variables are collectively important in explaining the overall creative work outcome at GIW. The high R-squared value and the statistical significance of the model indicate that the predictors have a

substantial influence on the dependent variable. These findings have important implications for understanding and potentially enhancing the factors that contribute to creative work performance in the given organizational context.

Table 14: ANOVA Table

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	103.810	5	20.762	49.402	.000[b]
	Residual	78.169	186	.420		
	Total	181.979	191			

a. Dependent Variable: Over all creative work at GIW:
b. Predictors: (Constant), Psychological safety at GIW:, supervisory support at GIW, Job Autonomy at GIW:, Work difficulty at GIW:, Perceived Work Significance.

Source: researcher's computation and SPSS 26 output results.

The ANOVA table presented shows that the regression model is statistically significant. The F-statistic of 49.402 with a p-value less than 0.001 indicates that the five predictor variables (Job Autonomy, Perceived Work Significance and Value, Work Difficulty, Supervisory Support, and Psychological Safety at GIW) collectively have a significant influence on the overall creative work outcome at GIW.

The sum of squares for the regression model is 103.810, which represents the amount of variation in the dependent variable that is explained by the predictor variables. The residual sum of squares is 78.169, which represents the unexplained variation. The mean square for the regression is 20.762, and the mean square for the residuals is 0.420, indicating that the regression model explains a substantial portion of the variance in the dependent variable.

These results suggest that the regression model has strong explanatory power and that the five predictor variables are collectively important in understanding and predicting the overall creative work outcome at GIW. The statistical significance of the model indicates that the relationship between the predictors and the outcome is unlikely to have occurred by chance, and that the model provides a good fit to the data.

The implication of these findings is that organizations should focus on enhancing the factors represented by the predictor variables, such as job autonomy, perceived work significance and value, work difficulty, supervisory support, and psychological safety, in order to foster and support overall creative work performance among their employees. By understanding the relative importance of these factors, organizations can develop targeted interventions and strategies to create an environment that is conducive to creative work and innovation.

This comprehensive interpretation integrates the goodness-of-fit measures and the significance of the regression model, providing a detailed understanding of the model's performance and areas for potential improvement.

Table 15: coefficients and statistical significance

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1.730	.381		-4.541	.000
	Job Autonomy at GIW:	.450	.051	.432	8.908	.000
	Perceived Work Significance and Value at GIW	.224	.072	.171	3.139	.002
	Work difficulty at GIW:	.365	.081	.258	4.490	.000
	supervisory support at GIW:	.467	.059	.407	7.962	.000
	Psychological safety at GIW:	.597	.076	.460	7.852	.000
a. Dependent Variable: Creative Work Behavior GIW:						

Source: researcher's computation and SPSS 26 output results.

The regression analysis reveals several significant relationships between the independent variables job autonomy, perceived work significance, work difficulty, supervisory support, and psychological safety and the dependent variable, the creative climate at GIW. Each predictor has a distinct impact on the creative climate, which sheds light on the factors that contribute to a supportive environment for creativity.

The constant term in the model, -1.730, represents the baseline creative climate when all predictors are at zero. Although this baseline value is not the primary focus, it underscores the importance of the predictors in creating a positive creative climate. Without the influence of job autonomy, perceived work significance, work difficulty, supervisory support, and psychological safety, the creative climate at GIW would be negative, highlighting that these variables are crucial for fostering a conducive creative environment.

Job autonomy emerges as a significant factor with a coefficient of 0.450 and a standardized beta coefficient of 0.432. This finding indicates that greater autonomy in job roles significantly enhances the creative climate. Employees who have control over their work methods, processes, and scheduling are more likely to experience a better creative climate. This result aligns with Amabile's (1996) argument that autonomy is vital for fostering creativity, as it allows employees the freedom to explore innovative solutions and express their creative ideas.

Perceived work significance and value also shows a positive relationship with the creative climate, as indicated by a coefficient of 0.224 and a standardized beta of 0.171. This suggests that when employees perceive their work as aligned with their personal values and contributing to the organization's goals, the creative climate improves. This supports the theory that meaningful work enhances motivation and creativity, a concept established in Hackman and Oldham's (1976) Job Characteristics Model, which asserts that seeing one's work as meaningful is a strong motivator for creative behavior.

Work difficulty, with a coefficient of 0.365 and a standardized beta of 0.258, further illustrates that challenging tasks positively influence the creative climate. This finding is consistent with Amabile's (1996) assertion that complex and difficult tasks stimulate creative thinking and problem-solving. By providing employees with challenging assignments, GIW can encourage innovative approaches and enrich the creative environment.

Supervisory support shows a significant positive effect on the creative climate, with a coefficient of 0.467 and a standardized beta of 0.407. This indicates that constructive feedback, recognition of creative efforts, and encouragement of new ideas from supervisors significantly enhance the creative climate. This result supports Eisenberger and Rhoades' (2001) research, which highlights that perceived organizational support from supervisors is closely linked to increased creativity and job satisfaction.

Psychological safety is the strongest predictor of a positive creative climate, with a coefficient of 0.597 and a standardized beta of 0.460. This finding underscores the importance of creating an environment where employees feel safe to share their ideas and take risks without fear of judgment or negative consequences. This supports Edmondson's (1999) argument that psychological safety is essential for fostering creative work and risk-taking.

The implications of these findings are clear and actionable. To enhance the creative climate at GIW, the organization should focus on increasing job autonomy for employees, which allows them more control over their work processes and encourages innovative thinking. This approach aligns with Amabile's (1996) emphasis on autonomy as a driver of creativity. Additionally, efforts to ensure that employees perceive their work as meaningful and aligned with the organization's goals can boost motivation and creative efforts, reflecting Hackman and Oldham's (1976) theory on the importance of meaningful work.

Providing challenging work assignments is also crucial, as complex and stimulating tasks can drive employees to engage in creative problem-solving, reinforcing Amabile's (1996) view on the role of work difficulty in creativity. Strengthening supervisory support through effective feedback and recognition is another key area, as supported by Eisenberger and Rhoades (2001), who found that such support significantly enhances creativity and job satisfaction.

Finally, cultivating psychological safety is essential for creating an environment where employees feel comfortable taking risks and expressing their ideas, as emphasized by Edmondson (1999). A safe and supportive atmosphere fosters open communication and collaboration, which are vital for a thriving creative climate.

Overall, the study's findings are consistent with existing literature on creativity and work environments. Amabile's (1996) research supports the roles of job autonomy and work difficulty

in fostering creativity, which is confirmed by the positive coefficients in this study. The significant impact of perceived work significance on the creative climate also supports Hackman and Oldham's (1976) theory. The importance of supervisory support and psychological safety for creativity, as highlighted by Eisenberger and Rhoades (2001) and Edmondson (1999), is reflected in the study's findings, demonstrating that these factors are crucial for enhancing the creative climate at GIW.

4.5 Qualitative Analysis

Exploring the creative work behavior of employees at GIW reveals a complex array of factors that influence how creativity is nurtured within the organization. The findings uncover several critical elements that both foster and impede creative behavior among employees.

One major insight is the role of diverse team interactions and efficient workflow systems in enhancing creativity. Employees at GIW engage in brainstorming sessions that draw on various perspectives and expertise, leading to innovative ideas. This collaborative approach not only encourages the exchange of unique insights but also supports effective problem-solving. Additionally, streamlined workflow systems help employees manage their tasks efficiently, freeing up time and mental resources for creative endeavors. This demonstrates that GIW's emphasis on a balance between structured processes and flexible approaches supports employees in pursuing creative initiatives.

Another significant factor in promoting creative work behavior is the level of autonomy employees experience in their roles. Those with greater autonomy are more likely to explore new technologies and organize themselves into teams, which allow them to tackle challenges in novel ways and develop innovative solutions. This finding highlights the importance of job autonomy as a crucial driver of creativity, suggesting that providing employees with more control over their work can enhance their creative output.

The significance of perceived work value is also evident in encouraging creative behavior. Employees who view their work as meaningful and impactful are more motivated to engage in creative efforts. Positive feedback on their contributions and opportunities for skill development reinforce this perception. These findings underscore the effectiveness of recognizing employees'

achievements and offering growth opportunities to motivate creative behavior. This approach emphasizes the importance of valuing employees' contributions and supporting their professional development to foster creativity.

The challenge of work difficulty reveals that complex tasks can stimulate creativity. Employees who face significant challenges are more likely to participate in collaborative brainstorming and experiment with new methods. This indicates that intellectual stimulation from difficult tasks encourages employees to think creatively and seek innovative solutions. The results suggest that incorporating challenging tasks and promoting a collaborative environment are effective strategies for enhancing creativity.

Supportive supervisory behavior contributes to creative work behavior, though its impact depends on how it is implemented. Supervisors who offer a balance of guidance, autonomy, and constructive feedback can effectively encourage creativity. This insight suggests that the role of supervisory support in fostering creativity relies on the quality of the interactions between supervisors and employees.

Lastly, the culture of psychological safety at GIW plays a significant role in supporting creative behavior. A work environment characterized by open communication and anonymous feedback mechanisms allows employees to express their ideas without fear of criticism. This atmosphere fosters creativity by enabling employees to take risks and propose new ideas, illustrating that psychological safety is essential for encouraging creative work behavior.

In summary, the findings reveal that several factors are crucial for driving creative work behavior at GIW. Job autonomy and psychological safety are key contributors, showing that creativity thrives when employees have freedom in their roles and feel secure in expressing their ideas. The challenge presented by difficult tasks also proves to be a significant factor in enhancing creative behavior. On the other hand, while supervisory support are relevant, they do not appear as significant in the quantitative analysis, suggesting their impacts might be more indirect or influenced by other factors.

4.6 Triangulating the Descriptive Findings with Qualitative Insights

The descriptive statistics and qualitative analysis of creative work behavior at Geosynthetics Industrial Works Plc (GIW) offer a comprehensive view of the factors influencing creativity within the organization. While the quantitative data provides a snapshot of employees' perceptions of job autonomy, work significance, work difficulty, supervisory support, and psychological safety, the qualitative findings deepen our understanding of how these factors affect creative work behavior.

The quantitative data indicates a moderate level of job autonomy at GIW, with a mean score of 3.38. This suggests that employees experience some degree of independence in their work but feel there is room for more freedom to explore creative approaches. This finding is echoed in the qualitative analysis, which highlights that employees with greater autonomy are more likely to experiment with new technologies and organize themselves into teams to tackle challenges creatively. The qualitative insights support the quantitative finding that increasing job autonomy could significantly enhance creative work behavior. By providing employees with more control over their tasks and processes, GIW could stimulate further creative thinking and innovation, a concept well-supported by the literature on job autonomy's role in fostering creativity (Amabile, 1996).

The descriptive statistics reveal that employees perceive their work as fairly significant, with a mean score of 3.74 for perceived work significance and value. This moderate-to-high score suggests that employees view their contributions as meaningful, which is a known motivator for creativity. The qualitative data supports this finding, emphasizing that employees who find their work meaningful are more motivated to engage in creative efforts. The alignment of these findings suggests that recognizing the value of employees' contributions and ensuring that tasks are engaging can sustain and amplify creative behaviors. This connection is consistent with research indicating that perceived work significance enhances creative motivation (Csikszentmihalyi, 1996).

With a mean score of 3.72, the quantitative data shows that employees find their work challenging yet manageable. This perception aligns with the qualitative findings, which indicate that challenging tasks stimulate creative thinking and encourage innovative solutions. Both sources of data highlight that while difficult tasks can promote creativity, there is a balance to be

struck to avoid frustration or burnout. The literature supports the idea that challenging work encourages creative problem-solving and innovation (Zhou & George, 2001). Thus, GIW's approach to task difficulty appears effective but could be fine-tuned to ensure that challenges stimulate creativity without leading to negative outcomes.

The quantitative analysis reveals a moderate level of perceived supervisory support, with a mean score of 3.44. Employees feel that supervisors provide constructive feedback and recognize their creative contributions, yet there is room for improvement in encouraging new ideas and fostering a supportive environment for experimentation. The qualitative data further explores this aspect, revealing that while supportive supervisory behavior can enhance creativity, its impact depends on the quality of the interactions between supervisors and employees. This insight underscores the need for GIW to enhance supervisory practices to better support creative endeavors, a point emphasized in the literature as crucial for fostering a culture of creativity (Edmonson, 1999).

The mean score of 3.43 for psychological safety indicates a moderate level of perceived safety for expressing creative ideas at GIW. The qualitative findings corroborate this, noting that a psychologically safe environment is essential for employees to take creative risks and propose new ideas. The literature also supports this view, stressing that psychological safety is fundamental for enabling creativity and innovation (Edmondson, 1999). To build on this foundation, GIW should focus on strengthening the psychological safety of their work environment to encourage more open and innovative contributions from employees.

The overall creative work behavior at GIW, with a mean score of 3.51, reflects a moderate level of creative engagement among employees. Both the quantitative and qualitative findings suggest that while there are positive elements supporting creative work behavior, there is also significant potential for improvement. The quantitative data shows that while factors like job autonomy, perceived work significance, work difficulty, supervisory support, and psychological safety contribute to creative behavior; they do so at a moderate level. The qualitative analysis emphasizes that fostering creativity requires a multifaceted approach that includes enhancing autonomy, providing meaningful work, and creating a supportive and safe environment for innovation. This holistic view aligns with the literature on creativity, which identifies these elements as key drivers of creative work behavior (Amabile, 1996; Csikszentmihalyi, 1996).

In conclusion, the triangulation of quantitative and qualitative findings reveals a coherent picture of the factors influencing creative work behavior at GIW. The quantitative data provide a broad view of employees' perceptions of job autonomy, work significance, work difficulty, supervisory support, and psychological safety. In contrast, the qualitative analysis offers deeper insights into how these factors impact creative behavior and suggests specific areas for improvement. By increasing job autonomy, enhancing the perceived significance of work, balancing work difficulty, improving supervisory support, and fostering psychological safety, GIW can create a more conducive environment for creativity and innovation. These strategies are well-supported by existing literature and offer practical pathways for enhancing creative work behavior in the organization.

4.7 Hypothesis Testing and Interpretation Based on Coefficients

The regression analysis offers a detailed exploration of how job autonomy, perceived work significance, work difficulty, supervisory support, and psychological safety influence the creative climate at GIW. Each coefficient from the model is instrumental in evaluating five hypotheses related to factors that drive creative work behavior.

Hypothesis 1: Employees who perceive higher job autonomy at GIW will report higher creative work behavior.

The analysis reveals a coefficient for job autonomy of 0.450 with a standardized beta of 0.432 and a p-value of 0.000. This result is highly significant, indicating that job autonomy is a major predictor of creative work behavior. The substantial positive coefficient supports the hypothesis that when employees have more control over their work processes and decision-making, they are more likely to engage in creative behaviors. This finding aligns with Amabile's (1996) argument that job autonomy is essential for fostering creativity, as it empowers employees to explore innovative ideas and approaches.

Hypothesis 2: Employees who perceive higher significance and value in their work will demonstrate higher levels of creative work behavior.

The coefficient for perceived work significance and value stands at 0.224, with a standardized beta of 0.171 and a p-value of 0.002. This positive and statistically significant coefficient supports the hypothesis that employees who view their work as meaningful and aligned with organizational goals are more likely to demonstrate creative work behavior. This finding reinforces Hackman and Oldham's (1976) Job Characteristics Model, which posits that when employees see their work as significant, it enhances their motivation and creative engagement.

Hypothesis 3: Employees who report higher levels of difficulty and intellectual stimulation in their roles will exhibit higher levels of creative work behavior.

Work difficulty shows a coefficient of 0.365, a standardized beta of 0.258, and a p-value of 0.000, confirming that work difficulty is a significant predictor of creative work behavior. The positive relationship indicates that employees who find their tasks challenging and intellectually stimulating are more likely to engage in creative problem-solving. This result supports Amabile's (1996) view that difficult and complex tasks stimulate creative thinking and contribute to a more innovative work environment.

Hypothesis 4: Psychological safety positively and significantly affects employee creative work behavior.

The coefficient for psychological safety is 0.597, with a standardized beta of 0.460 and a p-value of 0.000, indicating a strong positive effect on creative work behavior. This significant finding supports the hypothesis that a safe and supportive environment, where employees feel comfortable sharing ideas and taking risks without fear of negative consequences, is crucial for fostering creativity. This result is consistent with Edmondson's (1999) argument that psychological safety is essential for encouraging creative work and innovative thinking.

Hypothesis 5: Positive instances of supervisor behavior positively affect employee creative behavior at GIW.

The coefficient for supervisory support is 0.467, with a standardized beta of 0.407 and a p-value of 0.000. This significant positive coefficient confirms that effective supervisory behavior, such as providing constructive feedback and recognizing creative efforts, positively impacts creative work behavior. This finding supports the hypothesis and aligns with Eisenberger and Rhoades' (2001) research, which found that perceived support from supervisors is closely linked to increased creativity and job satisfaction.

Implications and Comparison with Literature

The results of the hypothesis testing validate all five hypotheses, demonstrating that job autonomy, perceived work significance, work difficulty, psychological safety, and supervisory support are significant predictors of the creative climate at GIW. These findings not only support the theoretical frameworks established by prominent scholars but also offer practical insights for enhancing creativity in the workplace.

The positive impact of **job autonomy** on creative work behavior confirms Amabile's (1996) theory that autonomy facilitates creativity by giving employees the freedom to explore new ideas and approaches. This suggests that increasing job autonomy at GIW could lead to a more innovative and creative work environment.

Perceived work significance also plays a crucial role in fostering creative work behavior, reflecting Hackman and Oldham's (1976) Job Characteristics Model. Employees who perceive their work as valuable and aligned with the organization's goals are more motivated to engage in creative tasks. Therefore, GIW could enhance creative behavior by helping employees see the significance of their roles within the larger organizational mission.

The findings regarding **work difficulty** support Amabile's (1996) perspective that challenging tasks stimulate creative thinking and problem-solving. By providing employees with intellectually stimulating and challenging work, GIW can foster a more creative and innovative environment.

The significance of **psychological safety** underscores Edmondson's (1999) argument that a safe and supportive environment encourages employees to share ideas and take risks. Ensuring that

employees feel comfortable in expressing their creative thoughts without fear of criticism is crucial for a thriving creative climate at GIW.

Finally, the role of **supervisory support** in enhancing creative work behavior aligns with Eisenberger and Rhoades' (2001) findings that perceived support from supervisors is linked to increased creativity and job satisfaction. This indicates that effective supervisory practices, such as providing feedback and recognizing efforts, are essential for cultivating a creative work environment.

In summary, these findings align with existing literature and offer actionable strategies for fostering creativity at GIW. By focusing on job autonomy, perceived work significance, work difficulty, psychological safety, and supervisory support, GIW can create a supportive environment that encourages and sustains creative work behaviors.

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Chapter Five: Summary of the Major Finding, Conclusion and Recommendations

5.1 Introduction

Chapter Five presents a comprehensive summary of the major findings, conclusions, and recommendations derived from the study on employee creative work behavior at Geosynthetics Industrial Works Plc (GIW) in Ethiopia. This chapter synthesizes the critical insights gained from analyzing the factors influencing creativity, such as job autonomy, perceived work significance, work difficulty, supervisory support, and psychological safety. It aims to provide a clear understanding of how these elements impact the creative climate within GIW. Additionally, actionable recommendations are offered to enhance creative work behavior and drive organizational innovation.

5.2 Summary of the Major Findings

The regression analysis reveals that job autonomy, perceived work significance, work difficulty, supervisory support, and psychological safety are significant predictors of the creative climate at Geosynthetics Industrial Works Plc (GIW). Each factor influences the creative environment differently, highlighting key areas for enhancing creativity in the organization.

Job autonomy is a strong predictor of a positive creative climate, with a coefficient of 0.450 and a standardized beta of 0.432. This finding indicates that employees who have more control over their work processes and decision-making experience a better creative climate. Increasing job autonomy can therefore stimulate innovative thinking and creative problem-solving, consistent with Amabile's (1996) theory on creativity.

Perceived work significance also positively affects the creative climate, with a coefficient of 0.224 and a standardized beta of 0.171. Employees who view their work as meaningful and aligned with organizational goals are more motivated to engage in creative efforts. This supports Hackman and Oldham's (1976) Job Characteristics Model, which emphasizes that meaningful work, enhances motivation and creativity.

Work difficulty has a notable impact on the creative climate, with a coefficient of 0.365 and a standardized beta of 0.258. Challenging tasks stimulate creative thinking and problem-solving,

reflecting Amabile's (1996) assertion that complex work environments foster creativity. This finding suggests that providing intellectually stimulating tasks can enrich the creative environment at GIW.

Supervisory support is also a significant factor, with a coefficient of 0.467 and a standardized beta of 0.407. Effective supervisory practices, such as offering constructive feedback and recognizing creative efforts, significantly enhance the creative climate. This result aligns with Eisenberger and Rhoades' (2001) research on the importance of perceived organizational support from supervisors.

Psychological safety is identified as the strongest predictor of a positive creative climate, with a coefficient of 0.597 and a standardized beta of 0.460. A safe environment where employees feel comfortable sharing ideas and taking risks is crucial for fostering creativity, supporting Edmondson's (1999) view that psychological safety is essential for creative work.

Overall, the study confirms that job autonomy, perceived work significance, work difficulty, supervisory support, and psychological safety all play vital roles in shaping the creative climate at GIW. These findings highlight actionable strategies for enhancing creativity, including increasing job autonomy, recognizing the value of work, providing challenging tasks, strengthening supervisory support, and fostering psychological safety. These results are consistent with established theories on creativity and offer practical recommendations for creating a more innovative and supportive work environment at GIW.

5.3 Conclusion

The findings from this study highlight several critical factors that influence the creative climate at GIW. The regression analysis and qualitative insights reveal that job autonomy, perceived work significance, work difficulty, supervisory support, and psychological safety are all significant predictors of creative work behavior. These results underscore the importance of creating a work environment that fosters creativity through both structural and psychological means.

Job autonomy is identified as a crucial factor for enhancing the creative climate, as employees with greater control over their work processes are more likely to engage in creative activities. This finding aligns with Amabile's (1996) theory that autonomy facilitates creativity by allowing employees the freedom to explore new ideas. To leverage this insight, GIW should consider increasing job autonomy by offering employees more freedom in their work methods and decision-making processes.

Perceived work significance also plays a significant role in motivating creative behavior. Employees who view their work as meaningful and impactful are more likely to demonstrate creative efforts. This supports Hackman and Oldham's (1976) Job Characteristics Model, which emphasizes that meaningful work is a strong motivator for creativity. GIW can enhance this perception by helping employees connect their individual tasks to the organization's broader goals and recognizing their contributions.

Work difficulty is another important predictor of creative work behavior. Challenging and intellectually stimulating tasks encourage employees to think creatively and seek innovative solutions, as supported by Amabile's (1996) research. GIW should continue to provide complex and stimulating tasks while ensuring that challenges are manageable to avoid potential frustration.

Supervisory support significantly affects the creative climate by offering constructive feedback and recognizing employees' creative efforts. This finding aligns with Eisenberger and Rhoades' (2001) research on the role of perceived organizational support. GIW can improve creative work behavior by enhancing supervisory practices, focusing on providing effective feedback and recognizing employees' achievements.

Finally, psychological safety is found to be the strongest predictor of a positive creative climate. Employees who feel safe to share ideas and take risks without fear of negative consequences are more likely to engage in creative behavior. This confirms Edmondson's (1999) argument that psychological safety is fundamental for creativity. To build on this, GIW should foster a culture of openness and support that encourages risk-taking and idea-sharing.

In summary, the study's findings suggest that GIW can significantly improve its creative climate by increasing job autonomy, enhancing the perceived significance of work, providing challenging tasks, improving supervisory support and strengthening psychological safety. These strategies supported by the existing literature, offer practical pathways for fostering a more innovative and creative work environment at GIW.

5.4 Recommendation

Based on the study's findings, here are five practical recommendations for Geosynthetics Industrial Works Plc (GIW) to enhance creative work behavior:

1. Increase Job Autonomy: Expand the scope of job autonomy by allowing employees greater freedom in their work methods, decision-making processes, and scheduling.

2. Enhance Perceived Work Significance: Develop initiatives to help employees see the broader impact of their work and align individual roles with the organization's goals. Recognize and celebrate contributions that advance GIW's mission.

3. Provide Challenging Tasks: Design and assign complex, intellectually stimulating tasks that push employees to think creatively and solve problems innovatively.

4. Improve Supervisory Support: Enhance supervisory practices by offering regular, constructive feedback and recognizing employees' creative efforts. Provide training for supervisors to balance guidance with autonomy.

5. Strengthen Psychological Safety: Cultivate a work environment that encourages open communication and risk-taking. Implement anonymous feedback mechanisms and create spaces for employees to share ideas without fear of judgment.

By implementing these recommendations, GIW can build a more supportive and innovative work environment that enhances creative work behavior and drives organizational success.

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Appendix-One

St. Mary's University,

School of Graduate Studies,

Department of MBA

Dear participants at Geosynthetics Industrial Works Plc (GIW),

I am Hellen Sisay, a student from the Department of Business Administration at St. Mary's University. I am conducting an academic research project entitled "Examining factors affecting employee creative work behavior: The Case of Geosynthetics Industrial Works Plc (GIW)." I would like to invite you to participate in my study by answering a set of survey questions. Any information you provide In this survey will be kept confidential and used solely for academic purposes. I kindly ask that you answer the questions honestly and impartially. Your candid and unbiased feedback is essential to the success of my study. Thank you in advance for your willingness to spare some 15-20 minutes from your precious time to participate in this study. I look forward to speaking with you soon.

Sincerely,

Hellen Sisay

Email: napy.sam02@gmail.com

Phone Number: +251913531780

Part One

Section 1 - Background Information

1. Gender Male ☐ Female ☐

2. In which age group are you?

18-25 ☐ 26-31 ☐ 32-40 ☐ above 40 ☐

3. Current Position within the organization

Managerial ☐ Non -Managerial ☐

4. What is your current Educational Qualification?

Diploma ☐ Degree ☐ Master‘s Degree ☐ PhD ☐

5. What is your Service year in the organization?

Less than 3 years ☐ 3 to 5 years ☐

6 to 8 years ☐ more than 8 years ☐

6. Your monthly income (in birr)
   a) < 5,000 birr
   b) 5000-9,999 birr
   c) 10,000-14,999 birr
   d) 15,000-19,999 birr
   e) 20,000 – 24,999 birr
   f) 25,000 birr and above

Part Two: This set of statements aims to gauge your sentiments and perceptions regarding factors influencing employee creative work behavior. Please indicate your agreement level with each statement by selecting the appropriate rating on the 5-point Likert scale provided.

N.B. Please mark your preferences by placing a tick (√) in the corresponding box.

1.1 To determine the effect of job autonomy on employees' creative work behavior at GIW,

N.B 1= Strongly Disagree 2= Disagree 3= Neutral 4= Agree 5= Strongly Agree

No	Items	1	2	3	4	5	Total
	Job Autonomy at GIW:						
1	In this organization, I feel empowered to make independent decisions about how I approach my work, including methods, processes, and scheduling.						
2	In this organization, I feel that having autonomy and flexibility contribute to my creative problem-solving and exploration of new ideas.						
3	In this organization, I feel that the ability to experiment with different approaches, without constant supervision, facilitates my sense of ownership and motivation towards creative projects.						
4	There are specific areas where I would wish for more autonomy to boost My creative potential.						
5	Overall, The job autonomy has helped me to develop creative expression and innovation at GIW.						

1.2 To examine the effect of perceived work significance and value on employee creative work behavior at GIW,

N.B 1= Strongly Disagree 2= Disagree 3= Neutral 4= Agree 5= Strongly Agree

No	Items	1	2	3	4	5	Total
	Perceived Work Significance and Value at GIW:						
1	I feel that my work at GIW aligns with my values and contributes meaningfully to the organization's goals.						
2	I perceive that my contributions are valued by colleagues and supervisors.						
3	In this organization, I find the tasks and projects assigned to me are clear, meaningful, and engaging enough to spark creative problem-solving.						
4	My supervisor's feedbacks effectively connect my work to the bigger picture and reinforce its significance.						
5	In this organization, I experience a sense of personal fulfillment when engaging in creative activities at work.						
6	Overall, I would say that the meaningfulness of my work at GIW motivates I to be more creative and innovative.						

1.3 To investigate the effect of work difficulty on employee creative work behavior at GIW.

per

No	Items	1	2	3	4	5	Total
	Work difficulty at GIW:						
1	I feel that the challenging tasks at GIW stimulate my creative thinking and lead to more innovative solutions.						
2	I believe that the difficulty of my work assignments encouraged me to explore unconventional approaches and solutions.						
3	I feel that tackling complex problems at GIW motivate me to engage in creative work behavior more often.						
4	There are specific types of difficult tasks that spark my creativity the most.						
5	Overall, I believe that challenging work has boosted my creative expression and innovation at GIW.						

1.4 To determine the effect of reward and compensation on employee creative work behavior at GIW.

N.B 1= Strongly Disagree 2= Disagree 3= Neutral 4= Agree 5= Strongly Agree

No	Items	1	2	3	4	5	Total
	Reward and Compensation at GIW:						
1	In this organization, I feel that receiving rewards or recognition for my creative contributions motivated me to be more innovative in your work.						
2	I am satisfied with the current system of rewards and recognition for creative work at GIW.						
3	I feel that my contributions are adequately valued and compensated at GIW						
4	In my opinion, fair compensation is important for motivating employees to engage in creative work at GIW.						
5	The clarity and transparency of reward structures at GIW positively impact my willingness to invest time and effort in creative projects.						
6	Overall, I feel that rewards and compensation Has positively influenced my creative drive at GIW.						

1.5 To analyze the effect of supervisory support on employee creative work behavior at GIW.

N.B 1= Strongly Disagree 2= Disagree 3= Neutral 4= Agree 5= Strongly Agree

No	Items	1	2	3	4	5	Total
	supervisory support at GIW:						
1	In this organization, my supervisor provides me with constructive feedback that helps me improve creative work.						
2	my feel encouraged and supported by my supervisor in exploring new ideas and approaches to your work						
3	In this organization, my supervisor recognizes and appreciates my creative contributions.						
4	In this organization, I feel comfortable discussing my creative challenges and ideas with my supervisor.						
5	In this organization, my supervisor fosters a supportive environment that encourages experimentation and risk-taking in creative work.						
6	Overall, I feel that supervisory support Has enhanced my creative work behavior at GIW.						

1.6 To determine the effect of psychological safety on employee creative work behavior at GIW.

N.B 1= Strongly Disagree 2= Disagree 3= Neutral 4= Agree 5= Strongly Agree

No	Items	1	2	3	4	5	Total
	Psychological safety at GIW:						
1	In this organization, I feel comfortable expressing my creative ideas and opinions, even if they differ from the norm, without fear of judgment or negative consequences.						
2	In this organization, the feedback I receive from colleagues and supervisors encourage and support my creative contributions.						
3	In this organization, the organizational culture actively support and promote exploration of innovative solutions.						
4	In this organization, I feel confident that my team values diverse perspectives and is open to learning from failures without criticism.						
5	The overall atmosphere at GIW promote open communication and collaboration, fostering creative work behavior.						
6	Overall, I would say that the psychological safety has enabled me to be creative and take risks at GIW.						

1.7 To assess the level of creative climate at GIW.

N.B 1= Strongly Disagree 2= Disagree 3= Neutral 4= Agree 5= Strongly Agree

No	Items	1	2	3	4	5	Total
	Creative climate at GIW:						
1	This organization publicly recognizes those who are creative						
2	The reward system here encourages employees' creative idea development.						
3	At GIW, people are allowed to try solve the same problems in different ways						
4	This organization can be described as flexible and continually adapting to change.						
5	There are adequate resources devoted to innovation in this organization.						

1.7 To assess the level of creative climate at GIW.

N.B 1= Strongly Disagree 2= Disagree 3= Neutral 4= Agree 5= Strongly Agree

No	Items	1	2	3	4	5	Total
	Creative Work at GIW:						
1	Overall, The job autonomy has helped me to develop creative expression and innovation at GIW.						
2	Overall, I would say that the meaningfulness of my work at GIW motivates I to be more creative and innovative.						
3	Overall, I believe that challenging work has boosted my creative expression and innovation at GIW.						
4	Overall, I feel that rewards and compensation Has positively influenced my creative drive at GIW.						
5	Overall, I feel that supervisory support Has enhanced my creative work behavior at GIW.						
6	Overall, I would say that the psychological safety has enabled me to be creative and take risks at GIW.						
7	Overall I feel that Creative climate at GIW:						
	Over all creative work at GIW:						

Appendix-Two

In-depth Interview Guide Line for Key Informants

This interview is part of a research project conducted by the Department of xxx at St. Mary's University. The study titled "Examining factors affecting employee creative work behavior: The Case of Geosynthetics Industrial Works Plc (GIW)" aims to gather insights into the factors influencing employee creative work behavior. The data collected will help identify the primary factors influencing creative work behavior at Geosynthetics Industrial Works Plc (GIW). It is essential for the interviewee to provide accurate information as the success of the research hinges on it. Moreover, all information shared during the interview will be treated confidentially.

1. Objective: Assess the extent to which employees manifest creative work behavior.
    - Can you provide examples of creative initiatives or projects undertaken by employees at GIW?
    - How do you perceive the level of creativity among staff members in their day-to-day tasks?
    - In your opinion, what factors contribute to fostering a culture of creativity within GIW?
2. Objective: Determine the effect of job autonomy on creative work behavior.
    - From your observations, how does the level of autonomy granted to employees impact their creative output?
    - Can you share instances where increased job autonomy led to innovative solutions or approaches?
    - In what ways do you believe job autonomy influences employee motivation and engagement in creative tasks?
3. Objective: Examine the effect of perceived work significance and value on creative work behavior.

- How do employees' perceptions of the significance of their work correlate with their creative contributions?
- Can you describe any initiatives or practices implemented at GIW to enhance employees' sense of value in their work?
- From your interactions with staff, how do you gauge the relationship between perceived work significance and creative output?

4. Objective: Investigate the effect of work difficulty on creative work behavior.
    - How do employees respond to tasks or projects that are perceived as particularly challenging or difficult?
    - Have you noticed any patterns in creative problem-solving behaviors among staff when faced with complex tasks?
    - In your opinion, how does the level of work difficulty influence employees' willingness to engage in creative endeavors?
5. Objective: Determine the effect of reward and compensation on creative work behavior.
    - From your perspective, how do reward and compensation structures influence employees' motivation to be creative?
    - Can you provide examples of reward systems or recognition programs implemented at GIW to incentivize creativity?
    - In your interactions with staff, do you observe any correlation between perceived rewards and employees' willingness to innovate?
6. Objective: Analyze the effect of supervisory support on creative work behavior.
    - How do supervisors contribute to fostering a supportive environment for creativity among their teams?
    - Can you share instances where effective supervisory support led to enhanced creative output from employees?

- What strategies or practices do supervisors employ to encourage and recognize creative contributions from their team members?

7. Objective: Determine the effect of psychological safety on creative work behavior.

    - How does the organizational culture at GIW promote psychological safety for employees to express their creativity?
    - Can you describe any initiatives or policies aimed at creating a safe space for experimentation and innovation?
    - From your perspective, how does psychological safety impact employees' confidence to take creative risks and share ideas?

8. Objective: Assess the level of creative climate at GIW.

    - How would you describe the overall climate regarding creativity within the organization?
    - In your experience, what specific factors contribute to fostering or inhibiting a creative climate at GIW?
    - What steps do you believe could be taken to further enhance the creative climate within GIW?