

**IMPROVING CREATIVE PERFORMANCE THROUGH OPPORTUNITY-  
ENHANCING HR PRACTICES: THE MEDIATION ROLE OF WORK  
ENGAGEMENT AND WORK-RELATED FLOW IN MANUFACTURING FIRM.**

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**ABSTRACT**

This study aims to examine the influence of opportunity-enhancing HR practices on creative performance, by considering the mediating roles of work engagement and work related flow. A quantitative approach was applied using a survey method and CB-SEM SmartPLS analysis on 317 manufacturing employees in Tangerang. The results indicate that opportunity-enhancing HR practices has a significant positive effect on both creative performance and work engagement. Additionally, work autonomy and proactive personality significantly influence work engagement, while proactive personality also affects work related flow. Furthermore, work related flow mediates the relationship between proactive personality and creative performance. The study recommends that manufacturing firms implement policies that provide space for employee participation, creativity, and development initiatives. The primary contribution of this research is to strengthen the role of opportunity-enhancing HR practices for creative performance through optimal work engagement and work related flow. As well as to broaden theoretical understanding of the psychological dynamics of the manufacturing work environment.

**Keywords:** Opportunity-Enhancing HR Practices, Work Engagement, Work Autonomy.

**ABSTRAK**

Penelitian ini bertujuan untuk mengkaji pengaruh *opportunity-enhancing HR practices* terhadap *creative performance* dengan mempertimbangkan peran mediasi *work engagement* dan *work related flow*. Studi ini menggunakan pendekatan kuantitatif dengan metode survey dan pengolahan data melalui CB-SEM pada perangkat *SmartPls* terhadap 317 karyawan di salah satu perusahaan sektor manufaktur di Tangerang. Hasil penelitian menunjukkan bahwa *opportunity-enhancing HR practices* berpengaruh positif signifikan terhadap *creative performance* dan *work engagement*. Selain itu, *work autonomy* dan *proactive personality* berpengaruh terhadap *work engagement*, serta *proactive personality* berpengaruh terhadap *work related flow*. *Work related flow* terbukti memediasi hubungan antara *proactive personality* dan *creative performance*. Implikasi penelitian ini merekomendasikan perusahaan manufaktur untuk menerapkan kebijakan yang memberi ruang partisipasi, fleksibilitas, serta pengembangan inisiatif karyawan. Kontribusi utama penelitian ini adalah memperkuat peran *opportunity-enhancing HR practices* dalam meningkatkan *creative performance* melalui *work engagement* dan *work related flow* yang optimal, serta memperluas pemahaman teoritis mengenai dinamika psikologis lingkungan kerja industri manufaktur.

**Kata kunci:** Peluang Praktik SDM, Keterlibatan Kerja, Otonomi Kerja.

**PENDAHULUAN**

The manufacturing sector plays a crucial role in the Indonesian economy. In 2024, there were approximately 31,795 medium- and large-scale manufacturing companies registered in Indonesia. This sector contributed significantly to the country's exports, reaching over USD 171.23 billion from January to November 2023 (Stannos, 2024). However, this sector faces numerous challenges, including a decline

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in its contribution to Gross Domestic Product (GDP) from 32% in 2002 to 19% in 2024, as well as declining raw material prices (Directorate of Industrial Statistics, 2024). Furthermore, more than 42,000 people lost their jobs in manufacturing companies in the first half of 2025, including those operating at the largest textile company, Sritex. Despite this, the manufacturing industry still accounts for the largest share of Indonesia's exports. Exports of manufacturing products are the largest contributor to national exports, reaching over USD 171.23 billion from January to November 2023 (Stannos, 2024). Furthermore, Indonesia's manufacturing Purchasing Managers Index (PMI) was recorded at 51.2 in December 2024, indicating an increase in activity at manufacturing companies (Limanseto, 2025). To remain competitive, Indonesia's manufacturing industry needs to adapt to global challenges and leverage innovation and creativity.

One way to address these challenges is by developing creative performance. This research focuses on how opportunity-enhancing HR practices can influence creative performance through the mediation of work engagement and work-related flow. Opportunity-enhancing HR practices can provide employees with opportunities to participate in decision-making, have freedom in completing their work, and create an environment that supports new ideas (Fadhila et al., 2020; Zhao et al., 2010). Providing space for employee innovation is crucial in the manufacturing industry, which tends to focus on efficiency and mass production (Lawler & Worley, 2016).

This study further examines how opportunity-enhancing HR practices can improve creative performance by providing work autonomy and work engagement in decision-making, and opportunities for growth. Many manufacturing companies in Indonesia, particularly in Tangerang, still rely on traditional approaches, focusing solely on routine work tasks and providing little room for employee innovation. In this study, work engagement and work-related flow were included as mediating variables. Several previous studies, such as Dai et al. (2024); Gürbüz et al. (2024), have shown that creative performance is associated with work engagement and work-related flow. However, combining the two in the context of beneficial human resources, particularly in the manufacturing industry in Indonesia, is relatively new in providing a broader understanding of company dynamics. Employees who experience work-related flow and work engagement in their work will have an impact on demonstrating creative performance.

By examining how work engagement and work-related flow can mediate the relationship between creative performance and opportunity-enhancing HR practices, this study attempts to fill this gap. Proactive personality factors, such as a person's tendency to act proactively when facing difficulties at work, will also be considered as components that can strengthen the relationship between opportunity-enhancing HR practices and work engagement. In terms of increasing innovation and competitiveness, this study is highly relevant for manufacturing companies in Indonesia. Declining productivity and difficulty competing globally are major issues facing the Indonesian manufacturing industry. Therefore, this study is expected to provide insight into how opportunity-enhancing HR practices, work autonomy, and work engagement can improve creative performance, which in turn has a positive impact on performance.

Furthermore, this study focuses on the manufacturing industry in Tangerang, which includes the automotive sector. The purpose of this study is to obtain further information regarding the factors that drive creative performance in an industry with varying conditions and characteristics. By considering the mediating role played by work engagement and work-related flow in manufacturing companies, this study examines the influence of opportunity-enhancing HR practices on creative performance, work engagement, work autonomy, and work-related flow. Furthermore, the purpose of this study is to discover how proactive personality can strengthen the relationship, fill the gap, and examine more deeply how work-related flow can mediate the relationship between proactive personality and creative performance, as well as how opportunity-enhancing HR practices can improve creative performance through the mediating role of work engagement and work-related flow. The results of this study are expected to contribute theoretically regarding the relationship between variables in the work environment and provide practical implications for Indonesian manufacturing companies, especially in the Tangerang region, in

improving creative performance and work engagement.

## METHOD

Data collection in this research study used a survey method by distributing questionnaires online using google form. Measurements are made using a scale linked with a range of 1-5 (1= strongly disagree to 5= strongly agree). Measurement of variables *Opportunity-enhancing HR Practices* consists of 10 statements adopted from (Kooij, H., *et al.*, 2022). For the variable *Work Engagement* consists of 10 statements adopted from (Schaufeli & Bakker, 2000). For the variable *Work Autonomy* consists of 8 statements adopted from (Van Veldhoven & Meijman, 1994). Then, for the variable *Creative Performance*, it consists of 5 statements adopted from (Gürbüz *et al.*, 2024; Zhou & George, 2001). Furthermore, for the variables *Proactive Personality* consists of 10 statements adopted from (Thomas & J, 1993). Then for the variable *Work Related Flow* consists of 6 statements adopted from (A. Bakker, 2008). The total measurement used is 49 statements, where the detailed statements can be seen in Appendix 2 regarding the operationalization of the variables and in Appendix 3 regarding the questionnaire.

$$n = \frac{1521}{1 + 1521 \cdot (0,05)^2} = \frac{1521}{1 + 1521 \cdot 0,0025} = \frac{1521}{1 + 3,8025} = \frac{1521}{4,8025} \approx 317$$

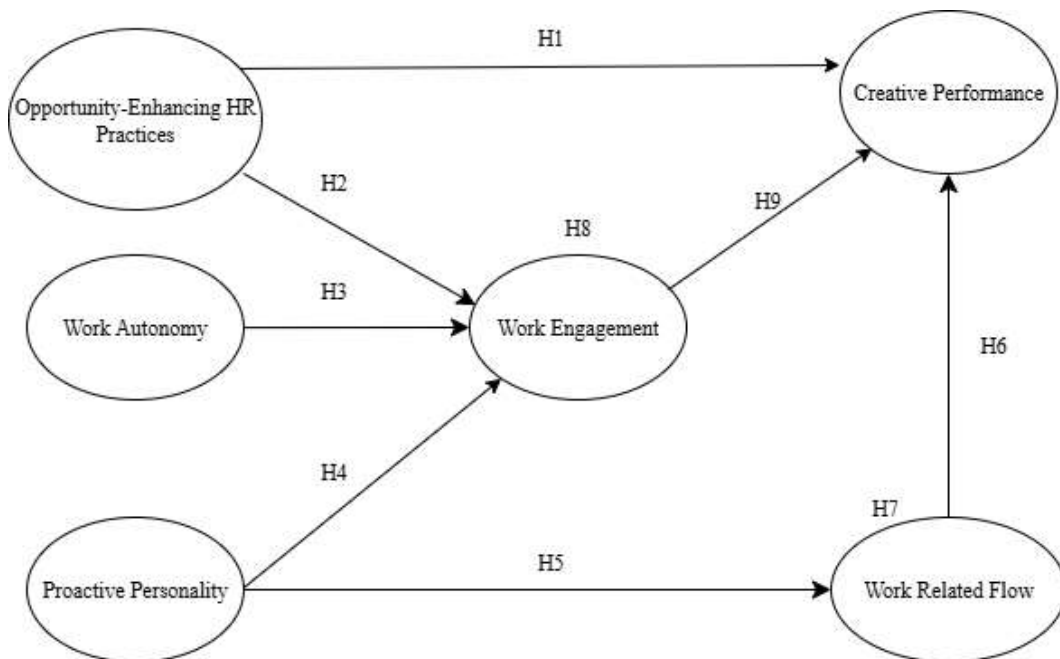
Figure 1. Sample Size Formula.

The research period was conducted for 1 month and 10 days (starting from June 5 to July 15) in 2025, starting from the instrument preparation stage, questionnaire distribution, to data processing. With the study population being all 1,521 employees of PT. X, however, the researcher was unable to survey and distribute questionnaires to that many people. Therefore, before distributing the questionnaire, the researcher should determine how many respondents are needed. The researcher determined the sample size using the formula *Slovin* with error rate (*margin of error*) by 5%. Population and (*margin of error*) of 5%: substituted into the formula as shown in Figure 1.

Thus, the number of respondents who will be used as a sample in this study is 317 employees at PT. X, a manufacturing industry company in Tangerang that produces spare parts for two and four wheels. This population includes all work units, including production, administrative staff, and managerial. If the required population exceeds the minimum population, the data will still be processed.

The sampling technique used in this study was purposive sampling, a technique that intentionally determines the sample based on specific criteria relevant to the research objectives. Respondent selection was conducted to ensure that participants had characteristics appropriate to the research topic, namely employees in the manufacturing sector in the Tangerang area. The respondent criteria used in this study included (1) manufacturing employees located in Tangerang; (2) having a minimum of two years of service; (3) being between 18 and 56 years of age; (4) not being gender-specific, either male or female; (5) having a minimum educational background of high school/vocational school or master's degree. Furthermore, the selection also took into account the proportion of levels: Operators (18.90%), Staff (45.60%), Supervisors (25.20%), Asst. Managers (6%), Managers (3.10%), and General Managers (1.60%). The largest proportion came from staff. Meanwhile, the number of respondents at the managerial level was smaller due to the more limited population. Thus, the managerial role remains significant because it has strategic authority in decision-making and implementation of organizational.

Figure 2: Research Model Framework



## DISCUSSION

### Opportunity-enhancing HR Practices

Nehles *et al.* (2023) states that opportunities are considered contextual or environmental factors that are beyond an individual's control but enable or constrain task performance. Job design, participation and decision-making programs, and organizational policies that support employee performance are some common examples of opportunity-enhancing human resource practices. These practices are intended to provide employees with the opportunity to maximize their abilities and increase their drive to succeed. According to Kooij & Vandevoorde. (2022), opportunity-enhancing human resource practices, commonly known as (*opportunity enhancing hr practices*) aims to give employees the opportunity to develop, participate more actively in their work, and increase their potential within the company.

Practice *EHRM* is a human resource practice that is rooted in the model *Ability-Motivation-Opportunity (AMO)*, practice *EHRM* gives employees the signal that they are empowered and engaged, which helps them stay motivated. This has a positive impact on work and organizational outcomes (Appelbaum *et al.*, 2001; Gürbüz *et al.*, 2024). According to Hobfoll (1989) conservation of resources (COR) theory, the practice of *EHRM* are essential resources for work. By providing significant autonomy, control, and opportunities for contribution, they increase employees' resource reservoirs and reduce the risk of resource loss and create a positive work environment. Employees are motivated by the resourceful environment created by these practices. *EHRM*, which results in increased creativity. Previous research also shows that the application of *EHRM* related to the increase *Work Engagement* (Gürbüz *et al.*, 2024), *Work Autonomy* (Kooij, H., *et al.*, 2022) and *creative behavior* (Prieto & Santana, 2014).

### Work engagement

Work engagement or work engagement, is a positive psychological state that reflects the extent to which an individual feels emotionally, cognitively, and physically connected to their work. Gürbüz *et al.* (2024) define work engagement as an affective state consisting of energy, enthusiasm, and absorption in work, mediated by HR practices that support engagement and the presence of work resources such as

autonomy and social support. Their research shows that work engagement plays a central role in bridging the relationship between HR practices and creative work outcomes. Bakker *et al.* (2014) also emphasized that engagement arises when individuals feel that their work is meaningful and supported by a conducive work environment. In this dimension, work engagement is not only the result of effective managerial practices but also an indicator of an individual's capacity to experience meaningfulness and deep engagement with their work. According to Diyanto *et al.* (2019) Work engagement not only impacts individual performance improvement but also contributes to overall organizational productivity. Therefore, work engagement can be defined as a psychological state that reflects high work enthusiasm, dedication to tasks, and the ability to immerse oneself in work activities, reinforced by a supportive work environment and recognition of individual contributions (A. B. Bakker *et al.*, 2014; Diyanto *et al.*, 2019; Gürbüz *et al.*, 2024).

## Work Autonomy

Job autonomy has a crucial role in the context of job design that supports engagement and creativity. Gürbüz *et al.* (2024) explained that work autonomy is the extent to which individuals have the freedom to choose methods, organize schedules, and determine task completion strategies that best suit their preferences. In their research, autonomy was found to be a factor that strengthens the influence of engagement on creativity, because individuals who feel in control of their work are more motivated to take risks and explore new ideas. Kooij *et al.* (2022) strengthens intrinsic motivation, especially when combined with a supportive work environment. Research by Reza & Anindita, (2021) indicates that work freedom gives employees the opportunity to determine their work methods, timeframes, and task completion standards according to their individual needs and preferences. This reinforces the idea that autonomy is not merely a technical freedom, but a psychological resource that allows individuals to feel trusted, valued, and accountable for their work results. Based on these findings, work autonomy can be defined as the degree of control employees have over core aspects of their tasks, which creates psychological conditions that support motivation, engagement, and innovative behavior (Gürbüz *et al.*, 2024; Kooij, Zacher, *et al.*, 2022; Reza & Anindita, 2021).

## Proactive Personality

Proactive Personality (*proactive personality*) is a dispositional character that reflects an individual's tendency to actively seek opportunities, take initiatives, and create change in their work environment. Proactive personality is associated with the ability of each individual to actively demonstrate strong initiative (Syara & Syah, 2022). Gürbüz *et al.* (2024) explained that proactive personality plays an important role as a moderating variable that strengthens the relationship between *HR practices* and *work engagement*, as well as between *work engagement* and creativity. In this context, proactive individuals tend to be more responsive to opportunities offered by the organization and are better able to manage psychological resources such as energy and dedication. They not only react to work demands but also actively shape work conditions that support goal achievement. (Spychala & Sonnentag, 2011) state that proactive individuals are more future-oriented and have a tendency to take on greater responsibility in the face of job uncertainty. Thus, a proactive personality can be understood as a consistent behavioral tendency to act proactively, encourage improvement, and positively influence the work environment, ultimately strengthening the individual's contribution to engagement and creativity (Gürbüz *et al.*, 2024; Spychala & Sonnentag, 2011; Syara & Syah, 2022).

## Work Related Flow

Work-related flow *is* an optimal psychological condition where employees are fully immersed in their work with a high sense of involvement and enjoyment. (A. B. Bakker & Xanthopoulou, 2013) explains that flow occurs when individuals perceive a balance between job challenges and their abilities,

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accompanied by clear goals and adequate feedback. In the context of the manufacturing industry, *flow* can improve the quality of problem solving, creativity, and adaptation to work pressure. (Jin *et al.*, 2017) added that *flow* related to increased focus, work speed, and long-term job satisfaction. *Flow* also mediates the relationship between *engagement* and creativity because it facilitates the maximum use of employees' cognitive and affective capacities.

## Creative Performance

Creative Performance or Creative Performance is an individual's ability to generate new ideas and useful solutions to meet work challenges. Creativity is considered a key factor in supporting organizational innovation and long-term competitiveness (Johannsen *et al.*, 2012). According to Amabile *et al.* (2005) creativity in the workplace is not only influenced by cognitive abilities and motivation, but also by the emotional conditions experienced by individuals. In the theory of creativity components developed by Amabile *et al.* (2005) there are three main components in creativity, namely dominant expertise, relevant creative processes, and intrinsic motivation, all of which are influenced by the social and emotional environment in the workplace. These social and environmental factors such as superior support, evaluation, and work atmosphere can strengthen or hinder employee creative performance. *Creative Performance* can also be measured through *Key Performance Indicator*(KPI) which covers financial, project and human resource aspects can help direct and optimize creativity in an organization (Amabile *et al.*, 2005; Johannsen *et al.*, 2012; Vartiak & Garbarova, 2024).

## Relationship Opportunity Enhancing HR And Creative Performance

Opportunity-Enhancing HR Practices refers to a description of human resource strategies that aim to provide employees with more opportunities to develop, contribute, and achieve their best potential within the organization (Villajos *et al.*, 2019). This practice can increase employee creativity by giving employees more freedom to make decisions, and providing resources to produce innovation. This is in line with the theory *Ability-Motivation-Opportunity (AMO)*, which emphasizes that if there are more opportunities for employees to be involved in their work, then intrinsic motivation can increase, which in turn can improve *Creative Performance* (Appelbaum *et al.*, 2001; Gürbüz *et al.*, 2024).

Theory *Conservational Resources (COR)* created by Hobfoll (1989) states that providing employees with opportunities to develop and expand their skills can help them reduce stress levels and become more creative. With a supportive work environment, employees can try new things, take risks, and experiment. This is an important part of increasing creativity in the workplace. When employees feel valued and supported for their creative efforts, they tend to spend more time and energy generating new and useful ideas. Ultimately, this will help organizations become more innovative and gain a competitive advantage (Prieto & Santana, 2014).

Empirical studies show that the implementation of *Opportunity-Enhancing HR Practices* can improve *Creative Performance* Research conducted by Gürbüz *et al.* (2024) shows that employees who have the opportunity to innovate and contribute to work decisions are more likely to use creative approaches to problem solving. In addition, research by Jiang *et al.* (2012) found that greater job control was given to *Opportunity-Enhancing HR Practices*. In addition, it was found in research conducted by Ma *et al.* (2017) that giving employees the opportunity to innovate independently can improve *Creative Performance*. This finding is in line with research conducted by C. Lin *et al.* (2022), which emphasizes how important it is for employees to be given the opportunity to participate in creative activities to be more productive and creative (Gürbüz *et al.*, 2024; Jiang *et al.*, 2012; Li, 2025; C. Lin *et al.*, 2022; Ma *et al.*, 2017).

Based on these findings, it can be proven that *Opportunity-Enhancing HR (OEHR) Practices* has a positive influence on the emergence of *Creative Performance*.

**H1:** There is a positive and significant influence between practice *OEHR* and creative *performance*.

## **Relationship Opportunity-Enhancing HR and Work Engagement**

Opportunity-Enhancing HR Practices (OEHR) aims to give employees more opportunities to participate, innovate, and grow in their work. This practice can improve *Work Engagement employees* by providing freedom, recognition, and access to resources that help them grow. When organizations provide opportunities for advancement, employees tend to be more motivated and more engaged in their work. According to the theory *Ability-Motivation-Opportunity (AMO)* (Appelbaum et al., 2001; Gürbüz et al., 2024). According to the theory *Job Demands-Resources (JD-R)* by A. B. Bakker & Demerouti (2017), resources increase *Work Engagement* on employees. With supportive resources such as autonomy, training, and career development, employees feel more engaged and enthusiastic about their work. This results in increased productivity and job satisfaction.

Several empirical studies show that *Opportunity-Enhancing HR Practices (OHR)* has been shown to increase *Work Engagement to employees* (Gürbüz et al., 2024). Research by A. Bakker (2021) shows that providing relevant training and opportunities for employees to participate in decision-making can improve *Work Engagement employees*. Another study by Urbini et al. (2021) also found that providing freedom in work through empowerment-based HR practices can increase engagement of employees. In addition, research conducted by A. Bakker (2021) found that the resources provided by organizations, such as opportunities for growth and innovation, are directly correlated with increased performance. *Work Engagement in work*. This shows that providing freedom in work through *Opportunity-Enhancing HR empowerment -based* can improve performance and welfare.

Based on these findings, the hypothesis proposed is:

**H2:** There is a positive and significant influence between the practice *OEHR* and *work engagement*.

## **Relationship Work Autonomy and Work Engagement**

Work Autonomy refers to the level of freedom given to employees to determine how they work, such as making decisions about time, tasks, and how to work. *Job Characteristics Model* by Hackman & Oldham (1976) showed that employees who have a lot of freedom to decide what they want about their work and have the ability to adapt it to their personal desires, which results in increased engagement performance. According to *Self-Determination Theory (SDT)* Ryan & Deci (2000) work autonomy supports the basic human need to control and determine actions, which results in *work engagement and job satisfaction*. With more freedom, employees can feel more valued and more motivated to make greater contributions to the workplace.

Work Autonomy Increases work engagement, according to empirical research. According to research conducted by A. B. Bakker & Xanthopoulou (2013), autonomy in the workplace causes employees to feel more empowered and empowered to participate in their work. According to research conducted by A. B. Bakker & Demerouti (2017), *work autonomy*, is one of the resources in JD-R theory, increasing *work engagement by giving employees more control over what they do*. Furthermore, research by Spreitzer et al. (2017) found that having autonomy in their work increases employees' intrinsic motivation, which in turn increases work engagement. Research by Harter et al. (2002) also found that employees with greater autonomy tend to feel more engaged and satisfied with their work, which is positively correlated with increased job performance. *work engagement*. Overall, the empirical evidence suggests that *work autonomy can improve work engagement*. A study by Suryowibowo & Syakarofath (2024), which used a comparative causal research method with a sample of 384 employees, with the result that work autonomy has a large influence on work engagement (*work engagement*). Seppälä et al. (2020) found various patterns in the relationship/autonomy And *work engagement through a six-year longitudinal study*. The strength of the data varied, but most patterns indicated a positive relationship between the variables. Based on the above findings, the following hypothesis can be formulated:

**H3:** There is a positive and significant influence between *work autonomy* and *work engagement*.

## Relationship Proactive Personality and Work Engagement

Several studies show *Proactive Personality* can improve *Work Engagement*. Because employees actively seek opportunities, take initiative, and persist in making significant changes, individuals with this personality *Proactive Personality* tend to have a high level of *engagement* high levels of job satisfaction (Mumpuni & Handayani, 2023; Wong & Jonathan, 2024). The constant drive to improve and set goals encourages employees to invest more energy and effort in their work, resulting in increased *Work Engagement* (Sutrisno *et al.*, 2024). Employees who have *Proactive Personality* not only responding to change, but also driving innovation and improvement in the workplace, which results in *engagement* sustainable (Caniëls *et al.*, 2018). This is especially true for dynamic work environments, where employees are more proactive and more engaged in their work due to greater flexibility and autonomy (Mumpuni & Handayani, 2023; Wong & Jonathan, 2024). In addition *Work Engagement* serves as a link between *Proactive Personality* and work results because employee performance directly affects organizational success and performance (Callea *et al.*, 2022). A state of flow in the workplace is more frequently experienced by proactive employees, who are characterized by high levels of energy, focus, and intrinsic motivation (Fitriana & Satrya, 2023). Proactive employees tend to align their personal goals with those of the company, resulting in a stronger connection to their work (Shin & Jeung, 2019). Therefore, *Proactive Personality* impact on work results indirectly through *Work Engagement*, shows how important it is for employees to develop both of these traits for the success of the company (S. H. Lin *et al.*, 2022).

Proactive Personality is a person's tendency to take the initiative to change their environment, solve problems, and find new opportunities. According to the theory *Social-Cognitive Career Theory* Zola *et al.* (2022) explained that someone who has a Proactive Personality tends to be more involved in work. By being *Proactive Personality*, employees can discover new opportunities, set clear goals, and face challenges in a more positive way, which results in higher levels of engagement in the workplace. According to the theory *Self-Determination* by Ryan & Deci L (2000) someone who *proactively tends* to be more independent and feel they have control over their work, which encourages employees to be more engaged. Based on the findings obtained, it shows that *proactive personality* plays an important role and has a positive influence in improving work *engagement*.

**H4:** There is a positive and significant influence between *proactive personality* and work *engagement*.

## Relationship Proactive Personality and Work Related Flow

Proactive Personality refers to a person's initiative when finding opportunities, facing challenges, and creating change. Due to the large number of positive behaviors and organizational psychology, employee emotions and positive psychology have become an academic concern (Khan *et al.*, 2022). According to the theory *flow* Csikszentmihalyi (1997) is when a person feels fully involved in an activity that is difficult but appropriate to his abilities, which results in feelings of satisfaction and deep involvement. *Proactive Personality* is someone who tends to seek challenges and adapt to the responsibilities they currently have, which allows employees to experience flow at work. Experience *follows* an ideal mental state in which a person devotes himself to an activity and derives pleasure from it (A. B. Bakker & van Woerkom, 2017), which explains why some people continue to do something even without rewards from external sources (Khan *et al.*, 2022). Liu *et al.* (2022) officially entered flow-related into organizational behavior and defines it as a short-term peak work experience, which indicates a person's deep concentration on his work. Highly proactive employees in organizations tend to be aggressive, pursue ambitious goals, are not complacent, and actively take action to find problems immediately and take advantage of opportunities to deal with problems (Thomas & J, 1993).

Strategy Proactive Personality can help employees experience *flow* (Bakker & van Woerkom, 2017). One significant personality resource is proactive personality; employees who have greater autonomy and influence are more likely to create an environment that supports the flow of thought (Schermuly & Meyer, 2020). Previous studies have shown that *Proactive Personality* can improve work *workflow* (McCormick

*et al.*, 2019). According to Schermuly & Meyer (2020) *Work Related Flow*, has a positive influence because they feel involved in the work, and enjoy the work and can improve employee welfare (Peifer *et al.*, 2020). Those who are highly proactive tend to pursue ambitious goals, and actively seek out problems to capitalize on opportunities and face challenges (Dai *et al.*, 2024).

Overall, the research findings suggest that people who *proactive personality* will improve *work related flow*, because they can actively change the work environment and take advantage of opportunities, which in turn results in a better work experience and *work flow higher* ((Dai *et al.*, 2024; Khan *et al.*, 2022; Liu *et al.*, 2022; Peifer *et al.*, 2020; Schermuly & Meyer, 2020). Based on the above findings, the following hypothesis can be formulated:

**H5:** There is a positive and significant influence between *proactive personality* and *work related flow*.

### **Relationship Work Related Flow and Creative Performance**

The extent to which employees can overcome difficulties and achieve goals by creating and implementing creative ideas is called *Creative Performance* (Amabile *et al.*, 2005). Creative ideas require significant energy, affective, and motivational resources, which makes them more difficult to generate and implement (Ye *et al.*, 2024). For example, people can generate innovative ideas quickly when they are in a positive mood. However, it requires consistent and persistent effort to select the most useful ideas from a pool of interrelated ideas (Madrid *et al.*, 2014). If employees design their work in a fun way, employees can make it more fun and interesting, so they are more motivated to complete it. In some cases, designing work in a way that increases *work flow* because tasks become more challenging and motivating (Scharp *et al.*, 2019).

Flexibility can help in creating more new concepts and solutions (Virga *et al.*, 2019). In addition, when people experience *work flow*, employees are often intrinsically motivated, and can help mobilize attentional resources and enthusiasm to address problems (Bakker *et al.*, 2020). According to Moneta (2004), higher levels of motivation can be triggered by flows that employees are more likely to develop various innovative ideas because employees continue to focus on one problem. In previous research *work related flow associated with creativity* (Amabile *et al.*, 2005; Csikszentmihalyi & LeFevre, 1989; Madrid *et al.*, 2014; Scharp *et al.*, 2019). For example, Csikszentmihalyi (1997) found that when they experienced flow, artists and musicians reported higher levels of creativity. In addition, Madrid *et al.* (2014) found that positive effects lead to more relevant associations in the mind. Based on the above findings, the following hypothesis can be formulated:

**H6:** There is a positive and significant influence between *work related flow* to *creative performance*.

### **Work Related Flow mediate the influence between Proactive Personality and Creative Performance**

The theoretical logic of the relationship between these variables is based on the understanding that *Proactive Personality*, which describes people who have a desire to change the work environment constructively and have the potential to improve the fluctuating experiences associated with *Work Related Flow* (Csikszentmihalyi, 1997). When individuals with *Proactive Personality* feeling empowered in work, tend to enter a state of fluctuation, namely experience with people who work.

Empirical studies support the mediating role *Work Related Flow* in a relationship *Proactive Personality And Creative Performance* For example, research conducted by Liu *et al.* (2022) found that a person with *Proactive Personality* has a greater chance of experiencing flow-in-depth, which in turn allows for the creation of innovative and unique creative ideas. This finding is in line with the ideas of J. Crant (2000); Dai *et al.* (2024); Gürbüz *et al.* (2024) shows that *Work Related Flow* serves as a link between *Proactive Personality And Creative Performance*. This is because *Work Flow* provide the emotional environment necessary to encourage *Creative Performance*.

Therefore *Work Related Flow* plays an important role as a mediator in the relationship between *Proactive Personality* with *Creative Performance*. This explains why people who have this personality

*Proactive Personality* tend to reach a higher level *Creative Performance* which is higher when in the situation *Work Related Flow*. Based on the findings above, the following hypothesis can be formulated:

**H7:** *Work Related Flow* mediate the relationship between *Proactive Personality* with *Creative Performance*.

## **Work Engagement mediates the influence between Opportunity-Enhancing HR and Creative Performance**

Improvement *engagement* tends to be associated with *Opportunity-Enhancing HR* which provides employees with the opportunity to participate in activities that require high skills and challenges. Studies (A. Bakker, 2008) show that providing employees with the opportunity to develop, collaborate, and take initiative can improve (*work engagement*) in work. Employees who feel empowered and given freedom have a greater tendency to be emotionally and cognitively engaged in work, which in turn can increase motivation and dedication (Gürbüz *et al.*, 2024).

In addition, the energy, enthusiasm and commitment shown by employees towards their work is greatly influenced by *Opportunity-Enhancing HR Practices*. Therefore, *OEHR* which increases *Work Engagement*, such as providing relevant training, providing freedom in decision-making, and providing opportunities for collaboration, can improve *Work Engagement*, in turn resulting in increased productivity and quality of work (Kavitha, 2025). according to research by A. B. Bakker *et al.* (2023), *OEHR* and self-development can improve *work engagement* in the workplace, thereby improving performance. Consequently, the more opportunities for employees to develop and participate in the decision-making process, the higher *engagement* in work, which will have a positive impact on the overall performance of the organization. With this change, *work engagement* serves as a mediator that connects *OEHR* better with better performance results and *engagement* higher in the job, which can help employees become *Creative Performance* (Ye *et al.*, 2024).. Based on the above findings, the following hypothesis can be formulated:

**H8:** *Work engagement* mediates the relationship between *old practices* and *creative performance*.

## **Relationship Work Engagement and Creative Performance**

Alfes *et al.* (2013) showed that employees who have *engagement* better able to think innovatively, find innovative solutions, and use flexible reasoning in difficult organizational conditions. Additional support for the relationship between *Work Engagement* And *Creative Performance*. A study conducted by Slåtten & Mehmetoglu (2011) in the hospitality industry found that *Work Engagement* is closely related to employee innovative behavior. A manager must measure engagement because this is the main factor that drives creative behavior. In other words, more employee engagement in an organization means more creativity and new ideas. The findings on the influence of *Work Engagement* to *Creative Performance* This is supported by the findings (Inam *et al.*, 2021). *Work engagement* is positively correlated with creativity, according to research (Bhutto *et al.*, 2021). Employees who are engaged and dedicated to their work will have more flexible thought processes and be ready to exert significant effort at work (Koch *et al.*, 2015). Therefore, individuals who have *work engagement* will be motivated to use their energy and abilities creatively to complete work-related tasks (A. B. Bakker & Xanthopoulou, 2013). Based on the findings above, the following hypothesis can be formulated:

**H9:** There is a positive and significant influence between *work engagement* and *creative performance*.

Based on the description of the hypothesis, the research framework is shown in the following image:

## **CONCLUSION**

The results of testing all hypotheses in this study indicate that each relationship between the proposed variables has a positive and significant influence. The implementation of opportunity-enhancing HR practices has been shown to have a positive effect on creative performance and work engagement. Furthermore, work autonomy and proactive personality also show a significant relationship with work

engagement. On the other hand, work engagement and work-related flow play a role in mediating the relationship between proactive personality and creative performance. These findings provide an important contribution to understanding the role of opportunity-enhancing HR practices, both directly and indirectly, in improving employee creative performance and work engagement in the manufacturing sector.

This study has several limitations that should be considered. First, the study's scope was limited to one manufacturing company in Tangerang, so the results cannot be generalized to other sectors or regions. Second, the variables studied only covered internal aspects of work, without considering external factors such as organizational culture and government policies. Third, the survey method used did not adequately reflect the complex dynamics of social interactions and work culture within organizations. Therefore, future research is recommended to involve a larger sample size from various industries and regions, and consider external contextual variables to gain a more comprehensive understanding.

Several indicators with low outer loading values (e.g., OEHR3, PP1, WA1, WE10, and WRF6), indicating that these statements do not robustly reflect the original construct in the manufacturing context. For example, the low work autonomy indicator may be due to workers feeling constrained by strict SOPs. Therefore, companies can provide room for innovation within the employee's work environment (e.g., flexibility in task completion methods without violating core SOPs). A weak proactive personality indicator indicates that some employees lack initiative. Companies can consider providing problem-solving and improvement-based training to help employees develop innovative solutions rather than simply waiting for instructions. For opportunity-enhancing HR practices, there is a weak indicator in OEHR3 related to task simplification. HR needs to review whether the work system is burdening employees. In the context of the manufacturing industry, with its production-target-driven environment, work engagement (WE10) and work-related flow (WRF6) dimensions are not optimally reflected. Management can encourage work variations, such as job rotation and job enrichment, to prevent employees from becoming trapped in monotonous routines, thereby improving weak indicators.

The creative performance indicator has an outer loading value (0.706–0.766), although CP5 is relatively weaker. Implications for manufacturing management include the need to focus on programs that support employee creativity, such as problem-solving training. Providing space on the production line, and recognizing new ideas. Strong creative performance helps manufacturing companies withstand market and technological dynamics. For the opportunity-enhancing HR practices indicator, all indicator values are stable (0.720–0.798). This implies that HR management in manufacturing companies can provide learning opportunities, technical training, job rotation, and career development. These implementations can increase motivation and engagement, making employees better prepared to face changes in the production process. For the proactive personality indicator, with a good average outer loading value (0.744–0.777), manufacturing companies can capitalize on the proactive personality of employees by providing opportunities for employees to propose process improvements, involving employees in quality control teams, and encouraging active participation in lean manufacturing programs. The outer loading value for the work autonomy indicator is said to be quite strong (0.732 – 0.814), this can implement giving employees the opportunity to make small decisions (for example regarding work techniques, tool adjustments, or shift arrangements) to be more responsible and productive. The loading value on the work engagement indicator (0.724 – 0.800), with a low WE5 (0.724), can be said that engagement is important in manufacturing because work is often repetitive. Management can increase engagement through a safe work environment, recognition for contributions, and open communication between managers and operators. In addition, there is a work-related flow indicator with a very high loading value (0.816 – 0.882). This can be said to be a flow condition where employees are very focused and enjoy their work, management in manufacturing companies needs to create a clear workflow, challenging but realistic targets, and technological support so that employees can achieve a state of flow more often.

The findings of this study provide clear strategic direction for the management of manufacturing companies, particularly in the automotive sector. The implementation of opportunity-enhancing HR

practices should focus on creating work systems that open up space for active employee participation, such as involvement in production team decision-making, continuous improvement programs, and employee innovation forums. To increase work engagement, management can implement interest- and competency-based job rotation programs and provide regular feedback that builds emotional attachment to work. Work autonomy also needs to be expanded through flexible work tasks, reduced micro-supervision, and the setting of results-based targets, rather than procedures. Furthermore, to encourage creative performance, companies can develop training in product design and innovative production techniques integrated with an employee-idea-based reward system. Employees' proactive personality characteristics can be cultivated through coaching and mentoring programs, as well as formal recognition of initiatives with positive impacts. The implications of work-related flow for manufacturing can help create focused, effective, and efficient working conditions. Implementing these policies not only improves work engagement and creative performance but also strengthens the company's sustainable competitiveness.

## REFERENCES

- Alfes, K., Truss, C., Soane, E. C., Rees, C., & Gatenby, M. (2013). The relationship between line manager behavior, perceived HRM practices, and individual performance: Examining the mediating role of engagement. *Human Resource Management, 52*(6), 839–859. <https://doi.org/10.1002/hrm.21512>
- Amabile, T. M., Barsade, S. G., Mueller, J. S., & Staw, B. M. (2005). *Affect and Creativity at Work*.
- Appelbaum, E., Bailey, T., Berg, P., & Kalleberg, A. L. (2001). Do high performance work systems pay off? *Research in the Sociology of Work, 10*(March), 85–107. [https://doi.org/10.1016/s0277-2833\(01\)80022-4](https://doi.org/10.1016/s0277-2833(01)80022-4)
- Bakker, A. (2008). The work-related flow inventory: Construction and initial validation of the WOLF. *Journal of Vocational Behavior, 72*(3), 400–414. <https://doi.org/10.1016/j.jvb.2007.11.007>
- Bakker, A. (2021). *How Employees' Use of HR practices affects Work Engagement: the mediating role of Psychological Capital and the moderating role of Workload*. 1–77.
- Bakker, A. B., & Demerouti, E. (2017). Job demands-resources theory: Taking stock and looking forward. *Journal of Occupational Health Psychology, 22*(3), 273–285.
- Bakker, A. B., Demerouti, E., & Sanz-Vergel, A. (2023). Job Demands-Resources Theory: Ten Years Later. *Annual Review of Organizational Psychology and Organizational Behavior, 10*(2023), 25–53. <https://doi.org/10.1146/annurev-orgpsych-120920-053933>
- Bakker, A. B., Demerouti, E., & Sanz-Vergel, A. I. (2014). Burnout and Work Engagement: The JDR Approach. *Annual Review of Organizational Psychology and Organizational Behavior, 1*(March), 389–411. <https://doi.org/10.1146/annurev-orgpsych-031413-091235>
- Bakker, A. B., Petrou, P., Op den Kamp, E. M., & Tims, M. (2020). Proactive Vitality Management, Work Engagement, and Creativity: The Role of Goal Orientation. *Applied Psychology, 69*(2), 351–378. <https://doi.org/10.1111/apps.12173>
- Bakker, A. B., & van Woerkom, M. (2017). Flow at Work: a Self-Determination Perspective. *Occupational Health Science, 1*(1–2), 47–65. <https://doi.org/10.1007/s41542-017-0003-3>
- Bakker, A. B., & Xanthopoulou, D. (2013). Creativity and charisma among female leaders: The role of resources and work engagement. *International Journal of Human Resource Management, 24*(14), 2760–2779. <https://doi.org/10.1080/09585192.2012.751438>
- Bhutto, T. A., Farooq, R., Talwar, S., Awan, U., & Dhir, A. (2021). Green inclusive leadership and green creativity in the tourism and hospitality sector: serial mediation of green psychological climate and work engagement. *Journal of Sustainable Tourism, 29*(10), 1716–1737. <https://doi.org/10.1080/09669582.2020.1867864>
- Callea, A., Caracuzzi, E., Costanzi, M., & Urbini, F. (2022). Promoting Flow at Work through Proactive Personality: A Sequential Mediation Model with Evidence from Italian Employees. *Sustainability*

- (Switzerland), 14(5). <https://doi.org/10.3390/su14052477>
- Caniëls, M. C. J., Semeijn, J. H., & Renders, I. H. M. (2018). Mind the mindset! The interaction of proactive personality, transformational leadership and growth mindset for engagement at work. *Career Development International*, 23(1), 48–66. <https://doi.org/10.1108/CDI-11-2016-0194>
- Crant, J. (2000). Proactive behavior in organizations. *Journal of Management*, 26(3), 435–462. [https://doi.org/10.1016/s0149-2063\(00\)00044-1](https://doi.org/10.1016/s0149-2063(00)00044-1)
- Crant, J. M., & Bateman, T. S. (2000). Charismatic leadership viewed from above: The impact of proactive personality. *Journal of Organizational Behavior*, 21(1), 63–75. [https://doi.org/10.1002/\(SICI\)1099-1379\(200002\)21:1<63::AID-JOB8>3.0.CO;2-J](https://doi.org/10.1002/(SICI)1099-1379(200002)21:1<63::AID-JOB8>3.0.CO;2-J)
- Csikszentmihalyi, M. (1997). Finding flow: the psychology of engagement with everyday life. *Choice Reviews Online*, 35(03), 35-1828-35–1828. <https://doi.org/10.5860/choice.35-1828>
- Csikszentmihalyi, M., & LeFevre, J. (1989). Optimal Experience in Work and Leisure. *Journal of Personality and Social Psychology*, 56(5), 815–822. <https://doi.org/10.1037/0022-3514.56.5.815>
- Dai, Y., Qin, S., Tang, Y. M., & Hou, J. (2024). Fostering employees' innovative behavior: The importance of proactive personality and work-related flow. *Acta Psychologica*, 246(February), 104278. <https://doi.org/10.1016/j.actpsy.2024.104278>
- Diyanto, A., Susanti, E., & Syah, T. Y. R. (2019). The Employee Innovation Intervening Role on Relationship between Work Engagement and Employee Performance. *Journal of Multidisciplinary Academic*, 3(5), 123–129.
- Edeh, E., Lo, W.-J., & Khojasteh, J. (2023). Review of Partial Least Squares Structural Equation Modeling (PLS-SEM) Using R: A Workbook. In *Structural Equation Modeling: A Multidisciplinary Journal* (Vol. 30, Issue 1). <https://doi.org/10.1080/10705511.2022.2108813>
- Fadhila, D., Aitouche, S., & Aksa, K. (2020). Analysis of Human Skills in Industry 4.0. *EKNOW 2020: The Twelfth International Conference on Information, Process, and Knowledge Management*, c, 24–29.
- Fitriana, A., & Satrya, A. (2023). *Employee Service Innovative Behavior in the Public Sector: The Role of Proactive Personality and Work Engagement*. Atlantis Press International BV. [https://doi.org/10.2991/978-94-6463-008-4\\_53](https://doi.org/10.2991/978-94-6463-008-4_53)
- Ghani, B., Hyder, S. I., Yoo, S., & Han, H. (2023). Does employee engagement promote innovation? The Facilitators of innovative workplace behavior via mediation and moderation. *Heliyon*, 9(11), e21817. <https://doi.org/10.1016/j.heliyon.2023.e21817>
- Gürbüz, S., Schaufeli, W. B., Freese, C., & Brouwers, E. P. M. (2024). Fueling creativity: HR practices, work engagement, personality, and autonomy. *International Journal of Human Resource Management*, 0(0), 1–30. <https://doi.org/10.1080/09585192.2024.2429125>
- Hackman, J. R., & Oldham, G. R. (1976). Motivation through the design of work: test of a theory, Organizational Behaviour and Human Performance. *Organizational Behavior and Human Performance*, 16(170), 250–279.
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2018). The Results of PLS-SEM Article information. *European Business Review*, 31(1), 2–24.
- Harter, J. K., Schmidt, F. L., & Hayes, T. L. (2002). Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: A meta-analysis. *Journal of Applied Psychology*, 87(2), 268–279. <https://doi.org/10.1037/0021-9010.87.2.268>
- Hobfoll, S. E. (1989). Conservation of Resources: A New Attempt at Conceptualizing Stress. *American Psychologist*, 44(3), 513–524. <https://doi.org/10.1037/0003-066X.44.3.513>
- Inam, A., Ho, J. A., Zafar, H., Khan, U., Sheikh, A. A., & Najam, U. (2021). Fostering Creativity and Work Engagement Through Perceived Organizational Support: The Interactive Role of Stressors. *SAGE Open*, 11(3). <https://doi.org/10.1177/21582440211046937>
- Jiang, K., Lepak, D. P., Hu, J., & Baer, J. C. (2012). How does human resource management influence

- organizational outcomes? A meta-analytic investigation of mediating mechanisms. *Academy of Management Journal*, 55(6), 1264–1294. <https://doi.org/10.5465/amj.2011.0088>
- Jin, L., Liu, T., & Chen, Y. (2017). *The effect of servant leadership on work-related well-being: The mediating role of work flow and work engagement*. <https://doi.org/10.1109/IEEM.2017.8290284>
- Johannsen, L., Renault, S., & Schwartz, L. (2012). *Designing for organizational creativity This paper was presented at The 5th ISPIM Innovation Symposium - Designing for organizational creativity Laurence Johannsen \*. December*.
- Kavitha, S. R. (2025). The Impact of Human Resource Practices on Organizational Performance: The Mediating Role of Work Engagement. *International Research Journal of Multidisciplinary Scope*, 6(1), 213–225. <https://doi.org/10.47857/irjms.2025.v06i01.02661>
- Khan, M., Ahmed, S., & Mubarak, S. (2022). *Innovation with flow at work: exploring the role of servant leadership in affecting innovative work behavior flow at work*. 45(September), 94–115.
- Knight, C., Patterson, M., & Dawson, J. (2017). Building work engagement: A systematic review and meta-analysis investigating the effectiveness of work engagement interventions. *Journal Of Organizational Behavior, J. Organiz. Behav.* 38, 792–812, 60(1), 5–22. <https://doi.org/10.1002/job>
- Koch, A. R., Binnewies, C., & Dormann, C. (2015). Motivating innovation in schools: School principals' work engagement as a motivator for schools' innovation. *European Journal of Work and Organizational Psychology*, 24(4), 505–517. <https://doi.org/10.1080/1359432X.2014.958471>
- Kooij, D., H. A., & Van De Voorde, K. (2022). Stimulating Job Crafting Behaviors of Older Workers: the Influence of Opportunity-Enhancing Human Resource Practices and Psychological Empowerment. *European Journal of Work and Organizational Psychology*, 31(1), 22–34. <https://doi.org/10.1080/1359432X.2021.1899161>
- Kooij, D., & Vandevoorde, K. (2022). Stimulating Job Crafting Behaviors of Older Workers: the Influence of Opportunity-Enhancing Human Resource Practices and Psychological Empowerment. *European Journal of Work and Organizational Psychology*, 31(1), 22–34. <https://doi.org/10.1080/1359432X.2021.1899161>
- Kooij, D., Zacher, H., Wang, M., & Heckhausen, J. (2022). Tilburg University Successful aging at work Kooij, Dorien; Zacher, Hannes; Wang, Mo; Heckhausen, Jutta. *Successfuk Aging At Work*.
- Lawler, E., & Worley, C. (2016). *Built To Change How to Achieve Sustained Organizational Effectiveness*.
- Li, T. (2025). How high-performance human resource practices foster employee creativity: evidence from R&D technicians. *Humanities and Social Sciences Communications*, 12(1). <https://doi.org/10.1057/s41599-025-05174-3>
- Lin, C., Shipton, H., Teng, W., Kitt, A., Do, H., & Chadwick, C. (2022). Sparking creativity using extrinsic rewards: A self-determination theory perspective. *Human Resource Management*, 61(6), 723–735. <https://doi.org/10.1002/hrm.22128>
- Lin, S. H., Lu, W. C., Chen, Y. C., & Wu, M. H. (2022). The Relationships among Proactive Personality, Work Engagement, and Perceived Work Competence in Sports Coaches: The Moderating Role of Perceived Supervisor Support. *International Journal of Environmental Research and Public Health*, 19(19). <https://doi.org/10.3390/ijerph191912707>
- Liu, W., van der Linden, D., & Bakker, A. B. (2022). Strengths use and work-related flow: an experience sampling study on implications for risk taking and attentional behaviors. *Journal of Managerial Psychology*, 37(1), 47–60. <https://doi.org/10.1108/JMP-07-2020-0403>
- Ma, Z., Long, L., Zhang, Y., Zhang, J., & Lam, C. K. (2017). Why do high-performance human resource practices matter for team creativity? The mediating role of collective efficacy and knowledge sharing. *Asia Pacific Journal of Management*, 34(3), 565–586. <https://doi.org/10.1007/s10490-017-9508-1>

- Madrid, H. P., Patterson, M. G., Birdi, K. S., Leiva, P. I., & Kausel, E. E. (2014). The role of weekly high-activated positive mood, context, and personality in innovative work behavior: A multilevel and interactional model. *Journal of Organizational Behavior*, 35(2), 234–256. <https://doi.org/10.1002/job.1867>
- McCormick, B. W., Guay, R. P., Colbert, A. E., & Stewart, G. L. (2019). Proactive personality and proactive behaviour: Perspectives on person–situation interactions. *Journal of Occupational and Organizational Psychology*, 92(1), 30–51. <https://doi.org/10.1111/joop.12234>
- Moneta, G. (2004). The Flow Model of Intrinsic Motivation in Chinese: Cultural and Personal Moderators. *Journal of Happiness Studies*, 5, 181–217. <https://doi.org/10.1023/B:JOHS.0000035916.27782.e4>
- Mumpuni, A. F., & Handayani, W. (2023). Journal of Business and Management Studies Determinants of Employee Retention in Pharmaceutical Companies: Case of Saudi Arabia. *Journal of Business and Management Studies*, 2709–0876, 8–22. <https://doi.org/10.32996/jbms>
- Nehles, A., Townsend, K., Cafferkey, K., & Trullen, J. (2023). Examining the Ability, Motivation and Opportunity (AMO) framework in HRM research: Conceptualization, measurement and interactions. *International Journal of Management Reviews*, 25(4), 725–739. <https://doi.org/10.1111/ijmr.12332>
- Peifer, C., Syrek, C., Ostwald, V., Schuh, E., & Antoni, C. H. (2020). Thieves of Flow: How Unfinished Tasks at Work are Related to Flow Experience and Wellbeing. *Journal of Happiness Studies*, 21(5), 1641–1660. <https://doi.org/10.1007/s10902-019-00149-z>
- Prieto, I., & Santana, M. P. (2014). Managing innovative work behavior: The role of human resource practices. *Personnel Review*, 43. <https://doi.org/10.1108/PR-11-2012-0199>
- Reza, A., & Anindita, R. (2021). the Importance of Job Autonomy As a Driver of Organizational Commitment Through Work - Life Balance for Employees in a Life Insurance Company. *Jurnal Aplikasi Bisnis Dan Manajemen*, July. <https://doi.org/10.17358/jabm.7.3.614>
- Ryan, R., & Deci L, E. (2000). Self-determination theory. *Routledge Handbook of Adapted Physical Education*, 55(1), 296–312. <https://doi.org/10.4324/9780429052675-23>
- Sarstedt, M., Ringle, C. M., & Hair, J. F. (2021). Partial Least Squares Structural Equation Modeling. In *Handbook of Market Research* (pp. 587–632). Springer International Publishing. [https://doi.org/10.1007/978-3-319-57413-4\\_15](https://doi.org/10.1007/978-3-319-57413-4_15)
- Scharp, Y. S., Breevaart, K., Bakker, A. B., & van der Linden, D. (2019). Daily playful work design: A trait activation perspective. *Journal of Research in Personality*, 82, 103850. <https://doi.org/10.1016/j.jrp.2019.103850>
- Schaufeli, W. B., & Bakker, A. B. (2000). Defining and measuring work FO IS TI. *Work*, 10–24.
- Schermuly, C. C., & Meyer, B. (2020). Transformational leadership, psychological empowerment, and flow at work. *European Journal of Work and Organizational Psychology*, 29(5), 740–752. <https://doi.org/10.1080/1359432X.2020.1749050>
- Schilling, M. (2017). Strategic Management of Technological Innovation (5th ed.). McGraw-Hill Education. In *Sustainability (Switzerland)* (Vol. 11, Issue 1).
- Seppälä, P., Mäkikangas, A., Hakanen, J. J., Tolvanen, A., & Feldt, T. (2020). Is autonomy always beneficial for work engagement? A six-year four-wave follow-up study. *Journal for Person-Oriented Research*, 6(1), 16–27. <https://doi.org/10.17505/jpor.2020.22043>
- Shin, I., & Jeung, C. W. (2019). Uncovering the turnover intention of proactive employees: The mediating role of work engagement and the moderated mediating role of job autonomy. *International Journal of Environmental Research and Public Health*, 16(5). <https://doi.org/10.3390/ijerph16050843>
- Slåtten, T., & Mehmetoglu, M. (2011). Antecedents and effects of engaged frontline employees: A study from the hospitality industry. *Managing Service Quality*, 21(1), 88–107.

<https://doi.org/10.1108/09604521111100261>

- Spreitzer, G. M., Cesinger, B., Gundolf, K., Hughes, M., Khedhaouria, A., Montani, F., Saks, A. M., Visco, D. P., Sen, S., Ryan, R. M., Deci, E. L., Rich, B. L., Lepine, J. A., Crawford, E. R., Parker, S. K., Bindl, U. K., Strauss, K., Zhao, X., Lynch, J. G., ... Bakker, A. B. (2017). Job engagement: Antecedents and effects on job performance. *Academy of Management Journal*, 55(3), 1–23. <https://doi.org/10.1086/651257>
- Spychala, A., & Sonnentag, S. (2011). The dark and the bright sides of proactive work behaviour and situational constraints: Longitudinal relationships with task conflicts. *European Journal of Work and Organizational Psychology*, 20(5), 654–680. <https://doi.org/10.1080/1359432X.2010.487646>
- Suryowibowo, K., & Syakarofath, A. (2024). Peran job autonomy terhadap work engagement pada karyawan. *Cognicia*, 12(246), 149–158. <https://doi.org/10.22219/cognicia.v12i2.37223>
- Sutrisno, Hadi, N., & Kadir, A. (2024). The Influence of Proactive Personality, Professionalism and Work Engagement on the Performance of Village Midwives in Handling Neonatal Complications Based on Integrated Management of Childhood Illness. *International Journal of Economics, Business and Management Research*, 08(05), 197–211. <https://doi.org/10.51505/ijebmr.2024.8514>
- Syara, S., & Syah, T. Y. R. (2022). The Effect of Proactive Personality, Work-Life Balance and Work Engagement on Turnover Intention. *Asia Pacific Management and Business Application*, 010(03), 331–344. <https://doi.org/10.21776/ub.apmba.2022.010.03.7>
- Thomas, S. B., & J, M. C. (1993). The proactive component of organizational behavior: A measure and correlates. *Journal of Organizational Behavior*, 14(August 1992), 103–118.
- Urbini, F., Chirumbolo, A., Giorgi, G., Caracuzzo, E., & Callea, A. (2021). Hrm practices and work engagement relationship: Differences concerning individual adaptability. *Sustainability (Switzerland)*, 13(19), 1–11. <https://doi.org/10.3390/su131910666>
- Van Veldhoven, & Meijman, T. (1994). Het meten van psychosociale arbeids-belasting met een vragenlijst: De Vragenlijst Beleving en Beoordeling van de Arbeid (VBBA) [Measuring psychosocial workload with a questionnaire]. *Tijdschrift Voor Bedrijfs- En Verzekeringsgeneeskunde*, 2, 229–230.
- Vartiak, L., & Garbarova, M. (2024). KEY PERFORMANCE INDICATORS FOR THE CREATIVE INDUSTRY. 10(2), 14–23.
- Villajos, E., Tordera, N., & Peiró, J. M. (2019). Human resource practices, eudaimonic well-being, and creative performance: The mediating role of idiosyncratic deals for sustainable human resource management. *Sustainability (Switzerland)*, 11(24). <https://doi.org/10.3390/SU11246933>
- Virga, D., Schaufeli, W., Waris, T., & Beek, I. (2019). Attachment Styles and Employee Performance : The Mediating Role of Burnout. 153(4), 383–401. <https://doi.org/10.1080/00223980.2018.1542375>
- Wong, C. D., & Jonathan, V. (2024). The Mediating Role of Proactive Personality in the Relationship between New Ways of Working (NWOW) and Work Engagement. *International Journal of Academic Research in Business and Social Sciences*, 14(10), 179–193. <https://doi.org/10.6007/ijarbss/v14-i10/22878>
- Ye, L., Li, Y., Zhang, N., & Zhang, J. (2024). The Influence of Work Engagement on Employee Affect and Creativity: Insights from Occupational Mental Health. *Behavioral Sciences*, 14(12), 1–14. <https://doi.org/10.3390/bs14121217>
- Zhou, J., & George, J. M. (2001). When Job Dissatisfaction Leads To Creativity: Encouraging The Expression Of Voice *Academy of Management Journal*, 44. *Academy of Management Journal*, 44, 1892(713), 682–696.
- Zola, N., Yusuf, A. M., & Firman, F. (2022). Konsep social cognitive career theory. *JRTI (Jurnal Riset Tindakan Indonesia)*, 7(1), 24. <https://doi.org/10.29210/30031454000>