

CHARTING THE COURSE TO INNOVATION: SAILING EXPERIENCE, JOB AUTONOMY, AND JUSTICE AS PREDICTORS OF INNOVATIVE WORK BEHAVIOR

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ABSTRACT: Innovative Work Behavior (IWB) has become essential to employees' work activities in today's swiftly changing work environment, particularly for those working in dynamic and unpredictable occupations, such as Seafarers. It has been suggested that perceived organizational justice, supervisor support, and job autonomy are significant factors that influence IWB. However, few studies in the maritime industry have examined these variables together. To address this lacuna in the literature, the present study examined these factors' direct and indirect effects on IWB. We found that job crafting, autonomy, perceived organizational justice, and supervisor support substantially predicted IWB using a stratified sampling technique and a sample of 576 Indonesian sailors in the maritime industry. In addition, the study's findings suggest that organizations should encourage job crafting and provide a fair and supportive work environment to encourage innovative behavior among mariners. The study's practical implications are discussed, and suggestions for future research are made.

Keywords: Job autonomy; Justice, Innovative Work Behavior; Job Demands-Resources (JD-R) theory; Job crafting

1. Introduction

The maritime industry is a cornerstone of international trade and commerce. It facilitates the transport of products and people across the world's oceans (Leider & Gommans, 2002). The industry includes shipping, fishing, and offshore exploration and production (2023, Anindito). Seafarers, the backbone of maritime operations, is one of the industry's most essential assets. They are accountable for piloting vessels, maintaining equipment, and ensuring crew and cargo safety (Hanafiah et al., 2022). Despite their important role in the industry, seafarers encounter unique obstacles in the workplace. The time they spend away from home is one of the greatest obstacles (Thayer, 2022). This separation from loved ones and support networks can negatively impact the mental and emotional health of Seafarers. In addition, sailors frequently labor in difficult weather conditions, including storms, high winds, and extreme temperatures (Jivthesh et al., 2022). Additionally, they must navigate unpredictable situations at sea, such as equipment failures, emergencies, and piracy concerns.

In light of these obstacles, it is crucial to comprehend the factors that affect the job performance, innovative behaviors, and well-being of Seafarers. This knowledge can assist organizations in the maritime industry in developing productive and fulfilling work environments for Seafarers. Indonesia is simultaneously one of the largest archipelagic nations in the world, with an extensive coastline and abundant marine resources (Mustofa et al., 2022). As a result, the maritime industry is of utmost significance to the Indonesian economy, accounting for a significant portion of its

GDP and employing millions of people (Anindito, 2023). Indonesian mariners play a crucial role in the industry by operating ships and other vessels and supporting offshore exploration and production (Lampe, 2021). Understanding the factors that influence Indonesian Seafarer's job work behaviors is crucial to ensuring the continued success of the Indonesian maritime industry because, like sailors in other nations, Indonesian sailors confront unique challenges.

Researchers have recently focused more on Innovative Work Behavior (IWB) and job crafting, recognizing their significance to individual and organizational performance (Sutardi et al., 2022). IWB has been identified as a key factor in enhancing organizational competitiveness and growth (Khan et al., 2022). Moreover, work crafting has improved employee engagement, job satisfaction, and well-being (Toyama, Upadyaya, & Salmela-Aro, 2022). Despite the expanding interest in these concepts, research does not examine Seafarer characteristics, organizational justice, and supervisor support about job crafting and IWB. This study seeks to fill this gap in the literature by investigating the effect of these factors on IWB and job crafting in the maritime industry. In addition, while some studies have investigated the factors that influence Seafarer behavior (Helzer, Tick, & Nissen, 2022; Zhou et al., 2023), there is still a lack of research on the mechanisms that connect Seafarer characteristics with their work behavior. Therefore, this study investigates the role of employment crafting as a mediator in this investigation. Employees engage in job crafting when they deliberate to modify their job demands, resources, and relationships to optimize their

work experience and improve their job performance (Sundar & Brucker, 2023). This study aims to understand the mechanisms underlying Seafarer's IWB by examining the mediating effect of job crafting.

This study also intends to investigate the moderating effect of sailing experience on this relationship. Understanding the moderating impact of sailing experience is essential for identifying the factors influencing Seafarer job construction and workplace behaviors (Esmaili et al., 2022) by investigating how the relationship between job crafting and IWB may vary depending on a person's sailing experience. Consequently, this study aims to shed light on this intricate relationship. This exhaustive investigation of the factors influencing Seafarers' job crafting and IWB will ultimately inform the development of interventions aimed at enhancing Seafarers' well-being and productivity in the maritime industry. Therefore, the principal objectives of this study are as follows:

- Investigate the impact of the Seafarer's job autonomy, perceived organizational justice, and supervisor support on IWB and job crafting.
- Explore the mediating role of job crafting in the association between Seafarer's job autonomy, perceived organizational justice, supervisor support, and IWB.
- Examine the moderating role of sailing experience in the relationship between job crafting and the Seafarer's IWB.
- Identify practical implications and recommendations for enhancing Seafarer's job performance, job satisfaction, and overall well-being.

By achieving these objectives, this study can facilitate the development of interventions and policies to enhance the Seafarer's work experience and well-being, which can have important implications for the success and sustainability of the maritime industry.

2. Theoretical Foundation and Hypothesis Development

This study is based on the Job Demands-Resources (JD-R) theory, which proposes that job demands and resources mediate the relationship between job autonomy and employees' well-being and work outcomes. According to the theory, "job demands such as workload, time pressure, and emotional demands can result in stress and burnout, while job resources such as autonomy, social support, and feedback can increase employees' motivation, engagement, and job satisfaction" (Janssen, 2000). In this study, it is anticipated that Seafarer job autonomy, including burden,

job autonomy, and social support from supervisors, will influence their IWB and job crafting (Bakker, Demerouti, & Sanz-Vergel, 2023). Sailors who perceive their job to have high demands and limited resources may be less likely to engage in IWB and job crafting. In contrast, mariners who perceive their jobs to be high in job resources and low in job demands are more likely to be engaged in IWB and job crafting and to be motivated. In addition, the JD-R theory posits that employees' job manufacturing is a form of resource creation that can improve their job resources and job outcomes (Udushirinwa, McVicar, & Teatheredge, 2023). This study investigates the role of job fabrication as a mediator in the relationship between the Seafarer's job autonomy, perceived organizational justice, supervisor support, and IWB. Through this method, the study intends to shed light on how job crafting can serve as a mechanism connecting job resources to IWB. Thus, the JD-R theory provides a useful framework for comprehending the complex relationships between Seafarers' job autonomy, organizational justice, supervisor support, job crafting, and IWB. The theory facilitates the identification of specific job demands and resources that influence the Seafarer's well-being and job outcomes, which can inform the development of policies and interventions to enhance the Seafarer's work experience and productivity in the maritime industry.

Seafarer's Job autonomy, Perceived Organizational Justice, Supervisor Support, and IWB

IWB can contribute to the performance and profitability of an organization (Purwanto, 2020). Literature suggests that job autonomy is an important predictor of employees' work behavior, including IWB (Almahamid & Ayoub, 2022). Studies have also shown that characteristics of employees, such as a high level of job autonomy, enable employees to have control over their work and encourage creativity and experimentation (Boxall & Huo, 2022). Similarly, it has been demonstrated that workload significantly negatively impacts IWB. When overburdened, employees may lack the time and energy to engage in IWB, resulting in decreased job satisfaction and fatigue (Charoensukmongkol, 2022). In addition, perceived organizational justice and supervisor support have been linked to positive employee behavior (DeConinck, 2010). Perceived organizational justice is the employees' perception of fairness and equity in the workplace, which can influence their motivation and engagement (Onyango, Egessa, & Ojera, 2022). Patnaik, Mishra, and Mishra (2023) found that perceived organizational justice is significantly associated with

positive behaviors. It also suggests that employees may be more motivated to participate in IWB if they view their organization as fair and just.

Similarly, supervisor support, which includes feedback, mentoring, and recognition, has been an important predictor of IWB (Karimi et al., 2023). When supervisors provide encouragement and acknowledgment, employees are more likely to feel appreciated and motivated to participate in IWB. Consequently, it is hypothesized that

H1: There is a positive impact of Seafarer's a) job autonomy, b) perceived organizational justice, and c) supervisor support on their IWB.

Job autonomy, Perceived Organizational Justice, Supervisor Support, and Job Crafting

Job crafting can involve modifying the tasks and responsibilities of their position, the social interactions in their work environment, and the way they perceive their position (Toyama et al., 2022). Studies have found that employees with a high level of job autonomy are more likely to engage in job crafting, as they can modify their jobs based on their preferences and requirements (Charoensukmongkol, 2022). Role ambiguity, or uncertainty regarding job responsibilities, has also been shown to decrease job crafting, as it may be difficult to modify a job when there is ambiguity regarding the role's expectations (Sahay, Gigliotti, & Dwyer, 2022). When employees perceive their organization as responsible and helpful, they are more likely to engage in job fabrication, according to research (Sørli et al., 2022). Organizational justice may increase workers' sense of ownership over their jobs, making them more willing to influence their work proactively (Hoang, Suh, & Sabharwal, 2022). It has also been demonstrated that supervisor support, including feedback, mentoring, and recognition, increases employees' job crafting. When supervisors provide support and recognition, employees are likelier to feel appreciated and motivated to engage in job crafting (Asif et al., 2023b). Extending previous findings in the maritime industry, it is therefore hypothesized that:

H2: There is a positive impact of Seafarer's a) job autonomy, b) perceived organizational justice, and c) supervisor support on their job crafting.

Job Crafting and IWB

Research indicates that IWB is positively associated with job crafting (Asif et al., 2023a). Innovation is essential for organizations to maintain their competitiveness and success. When employees are free to modify their job tasks according to their preferences and needs, they

develop a sense of ownership over their work, increasing their motivation and engagement (Williams, Lopiano, & Heller, 2022). Moreover, job crafting contributes to the employees' perception of purpose and significance in their work, enhancing their IWB. Consequently, it is anticipated that by granting autonomy to employees, job crafting will increase their sense of competence and connectedness to their work, resulting in greater IWB. In addition, grasping the relationship between job crafting and IWB in the maritime industry is essential for promoting the success and competitiveness of the industry. As sailors encounter unique challenges in their work environment, giving them opportunities to shape and modify their job can increase their motivation, engagement, and IWB, resulting in a more successful and sustainable maritime industry (Esmaili et al., 2022; Mitchell, Wilson-Mah, & Van, 2022). It is therefore hypothesized that;

H3: Seafarers' job crafting has a positive impact on their IWBs.

Job Crafting as a Mediator

This study suggests that job fabrication may mediate between Seafarers' job autonomy, perceived organizational justice, supervisor support, and IWB. Scholars have found that job crafting can mitigate the negative effects of high job autonomy on employees' work behavior by permitting them to modify their jobs according to their requirements and preferences (Zhang & Parker, 2022). Similarly, Patnaik et al. (2023) report that positive employee perceptions of an organization's impartiality and the support they receive from their supervisors are more likely to translate into motivation and work engagement. In addition, the current study hypothesizes that Job crafting can give seafarers a sense of control and autonomy in their work, thereby increasing their motivation and engagement and resulting in higher IWB levels. In addition, job crafting can provide employees with opportunities to acquire and maintain job resources, increasing their motivation and engagement at work and ultimately leading to greater levels of IWB (Khan et al., 2022). This can further contribute to the success and sustainability of the industry. It is therefore hypothesized that;

H4: Job crafting mediated the association of Seafarer's a) job autonomy, b) perceived organizational justice, and c) supervisor support with their IWBs.

Moderating Role of Sailing Experience

Experience is a crucial factor that can influence an employee's IWB. As employees acquire experience

on the job, they gain a deeper understanding of their job tasks and the resources available to them, according to research (Chemali et al., 2022). This study hypothesizes that workplace resources can interact with employees' capacity to engage in job-crafting activities, ultimately resulting in greater IWB. In addition, focusing particularly on the maritime industry, it is anticipated that experienced sailors may have developed a sense of mastery and autonomy in their jobs, which can increase their motivation and participation in job-crafting activities and IWB. Individual differences such as motivation, learning style, and personality may also play a role in determining the impact of the sailing experience (Xu, 2022). Simultaneously, experienced mariners may have a greater sense of autonomy and competence in their jobs, resulting in greater satisfaction of these psychological needs and, ultimately, a boost in their

motivation and engagement in job crafting and IWB. It is therefore hypothesized that;

H5: Sailing experience moderates the association of Seafarer's job crafting with their IWBs such that the association is stronger in the case of more experienced sailors.

Theoretical Framework of the Study

The study's theoretical framework, founded on the Job Demands-Resources (JD-R) model, is depicted in Figure 1. The model posits that job resources such as job autonomy, perceived organizational justice, and supervisor support can positively affect job crafting behaviors, thereby facilitating IWB. In addition, the graph illustrates the moderating effect of sailing experience on the relationship between job crafting and IWB.

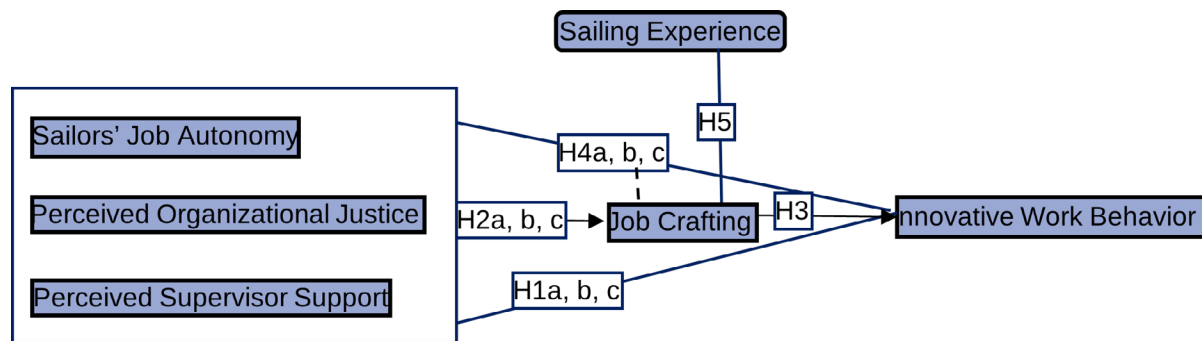


Figure. 1 Theoretical Framework

3. Research Methodology

This study utilized a stratified sampling method to acquire a representative sample of Indonesian sailors. "Stratified sampling is a method in which the population is divided into subgroups or strata based on certain characteristics, and then a random sample is selected from each stratum proportional to its size" (Ismail et al., 2021). This investigation stratified the population of Indonesian sailors based on their rank and vessel type. This enabled a more representative sample that accurately reflected the population's diversity. The study population of Indonesian sailors was stratified according to rank and vessel type. Early in 2022, data collection for this study was conducted. The sampling procedure consisted of multiple stages. First, the population of Indonesian sailors was stratified according to their rank and vessel class. Then, a random sample proportional to the size of each stratum was selected. A total of 840 sailors were invited to participate in the study, and 576 responded, with a response rate of 67.85%.

The researchers distributed and collected self-administered questionnaires to collect the data. Several steps were taken to ensure the integrity of the data. The researchers provided clear instructions on completing the questionnaire and emphasized the importance of providing truthful and accurate answers. Second, the questionnaire was piloted on a small sample of 102 mariners to identify any potential issues with its wording or structure. Researchers monitored the data collection process to ensure that questionnaires were accurately filled out and any missing data or inconsistencies were addressed. In addition, this study meticulously considered and addressed ethical considerations to safeguard the participants' rights and well-being. The researchers obtained informed consent, maintained confidentiality and anonymity, avoided causing harm or distress to participants, and adhered to the institutional and professional organizations' ethical guidelines.

Study Measures

The IWB scale was adapted from Janssen's (2000)

Innovative Behavior Inventory. The nine-item questionnaire evaluated various aspects of innovative behavior. The job crafting scale was adapted from Tims, Bakker, and Derks (2012), with a particular emphasis on its five-item Increasing structural job resources. According to Colquitt (2001), the perceived organizational justice scale consisted of 12 items measuring various administrative justice aspects. Adapted from DeConinck (2010), the supervisor support scale consisted of five items. Four items adapted from Bayoumy (2019) were used to assess job autonomy. Finally, sailing expertise was measured with five items measuring various aspects, including years of experience, certification level, and vessel type.

Demographic Characteristics

The average respondent was 35 years old (SD=7.2), and the respondents were male (75%). The majority of respondents were married (63%) with children (55%) and high school graduates (58%). Regarding

work characteristics, the majority of respondents had more than five years of sailing experience (64%), worked on commercial vessels (52%), and held the rank of seaman or officer (80%). Regarding organizational characteristics, most respondents (61%), as opposed to the remainder (39%), were employed by private companies. The average tenure with the current employer was four years (standard deviation=2.3). Most respondents reported having a direct supervisor (85%), and their average relationship with their supervisor lasted three years (SD=1.8). In terms of demographics, work characteristics, and organizational characteristics, the sample was representative of the Indonesian population of seafarers.

4. Data Analysis and Results

Descriptive statistics were conducted using "the Statistical Package for Social Sciences (SPSS) version 26.0." Table 1 presents detailed descriptive statistics of the measures.

Table 1. Descriptive Statistics of Study Measures

Measure	Mean	SD	Skewness	Kurtosis	Min	Max
IWB	3.99	0.65	-0.13	-0.69	2.00	5.00
Job Crafting	3.32	0.67	-0.26	-0.65	1.00	5.00
Perceived Organizational Justice	4.56	0.56	0.24	-0.44	3.00	5.00
Supervisor Support	4.80	0.65	-0.09	-0.83	1.80	5.00
Job Autonomy	3.45	0.65	-0.15	-0.56	2.00	5.00
Sailing Experience	3.76	0.63	0.77	0.25	1.00	5.00

The participants perceived moderate to high levels of IWB, job crafting, perceived organizational justice, supervisor support, and job autonomy, as indicated by mean scores ranging from 3.45 to 4.43. Regarding the interpretation of the results, all measurements' means and standard deviations fall within reasonable ranges. The skewness values are near zero, indicating that the data are approximately symmetrical. However, the sailing experience measure's kurtosis values are slightly higher than desired, indicating that the distribution may be more peaked than a normal distribution. These descriptive statistics suggest that the measures can be utilized in the analysis.

Measurement Model Assessment

Important to any structural equation modeling (SEM) analysis is the assessment of the measurement model. This study determined the validity and reliability of the measurement items by utilizing confirmatory

factor analysis (CFA) in SmartPLS v.4 to evaluate the measurement model. First, we examined the "factor loadings and average variance extracted (AVE)" for each indicator variable to determine the convergent validity of the measurement model (Mansoor, Awan, & Paracha, 2022; Sahay et al., 2022). As depicted in Figure 2, factor loadings represent the intensity of the relationship between the indicator variable and its corresponding latent variable. AVE represents the proportion of the variance in the indicator variables explained by their respective latent variable. For convergent validity, the factor loadings and AVE values must be greater than 0.70 and 0.50, respectively. As shown in Table 2, all factor loadings were greater than 0.70, and all AVE values were greater than 0.5, indicating that all latent variables possessed good convergent validity. Additionally, composite reliability (CR) values were greater than 0.8, indicating that all latent variables had high internal consistency reliability.

Table 2: Factor Loadings, Reliability, And Validity

Constructs/items	FL	AVE	CR	CA
Sailor's Job Autonomy	0.585	0.849	0.765	
JA1: I have a great deal of freedom in deciding how to do my job.	0.768			
JA2: I can make decisions about how I do my work.	0.781			
JA3: I have control over the methods and procedures I use in my job.	0.772			
JA4: I am given considerable discretion in scheduling my activities at work.	0.737			
Perceived Organizational Justice	0.558	0.938	0.841	
POJ1: My organization uses fair procedures to make decisions that affect me.	0.777			
POJ2: My organization considers the personal feelings of its employees when making decisions.	0.738			
POJ3: My organization treats employees with kindness and concern.	0.742			
POJ4: My organization explains its decisions thoroughly.	0.727			
POJ5: My organization provides employees with opportunities to voice their opinions.	0.751			
POJ6: My organization treats employees without bias or favoritism.	0.708			
POJ7: My organization provides employees with opportunities to appeal decisions.	0.751			
POJ8: My organization makes decisions based on accurate information.	0.784			
POJ9: My organization follows ethical standards.	0.743			
POJ10: My organization treats employees with respect.	0.716			
POJ11: My organization takes into account the needs of its employees.	0.782			
POJ12: My organization treats employees fairly.	0.743			
Perceived Supervisor Support	0.639	0.898	0.750	
PSS1: My supervisor is supportive of my work-related goals.	0.728			
PSS2: My supervisor is willing to listen to my work-related concerns.	0.881			
PSS3: My supervisor provides me with useful feedback on my job performance.	0.862			
PSS4: My supervisor helps me to develop my skills and abilities.	0.755			
PSS5: My supervisor encourages my personal and professional growth.	0.760			
Job Crafting	0.643	0.900	0.805	
JC1: I try to develop my capabilities.	0.730			
JC2: I try to develop myself professionally.	0.842			
JC3: I try to learn new things at work.	0.837			
JC4: I make sure that I use my capacities to the fullest.	0.784			
JC5: I decide on my own how I do things.	0.812			
IWB	0.613	0.941	0.819	
IWB1: Creating new ideas for difficult issues.	0.764			
IWB2: Searching out new working methods, techniques, or instruments.	0.790			
IWB3: Generating original solutions for problems.	0.801			
IWB4: Mobilizing support for innovative ideas.	0.786			
IWB5: Acquiring approval for innovative ideas.	0.763			
IWB6: Making important organizational members enthusiastic about innovative ideas.	0.794			
IWB7: Transforming innovative ideas into useful applications.	0.789			
IWB8: Introducing innovative ideas into the work environment in a systematic way.	0.776			
IWB9: Evaluating the utility of innovative ideas.	0.782			
Sailing Experience	0.567	0.867	0.764	
SE1: How many years have you been sailing?	0.757			
SE2: Have you received any certification for sailing? If yes, please specify the level of certification.	0.719			
SE3: What type of vessel(s) have you sailed on? Please select all that apply.	0.777			
SE4: How frequently do you engage in sailing activities?	0.774			
SE5: Have you ever participated in a sailing competition or race? If yes, please specify the type of competition or race.	0.736			

"Note: FL= Factor Loadings AVE=Average Variance Extracted; CR=Composite Reliability; CA=Cronbach's Alpha."

Next, we examined the HTMT ratio and the square root of AVE for each latent variable to determine the discriminant validity of the measurement model. (Henseler, Ringle,

& Sarstedt, 2015; Noor, Mansoor, & Shamim, 2022). As shown in Table 2, the square root of AVE was greater than the correlations between each latent variable and any

other latent variable in the model, indicating discriminant validity. In addition, the HTMT ratios were less than 0.85, indicating that the indicator variables accurately measured the latent variables for which they were intended. Therefore, the measurement model analysis results suggest that the measurement items utilized in this study have good convergent and discriminant validity and good internal consistency reliability (Hair et al., 2019). These results support using these measurement items in future structural model analyses.

Table 2. HTMT Ratio

Latent Variable	1	2	3	4	5	6
1. Seafarer's Job autonomy	0.764					
2. Perceived Organizational Justice	0.437	0.746				
3. Supervisor Support	0.465	0.400	0.799			
4. Job Crafting	0.289	0.244	0.271	0.801		
5. IWB	0.224	0.379	0.328	0.287	0.782	
6. Sailing Experience	0.399	0.231	0.256	0.342	0.281	0.752

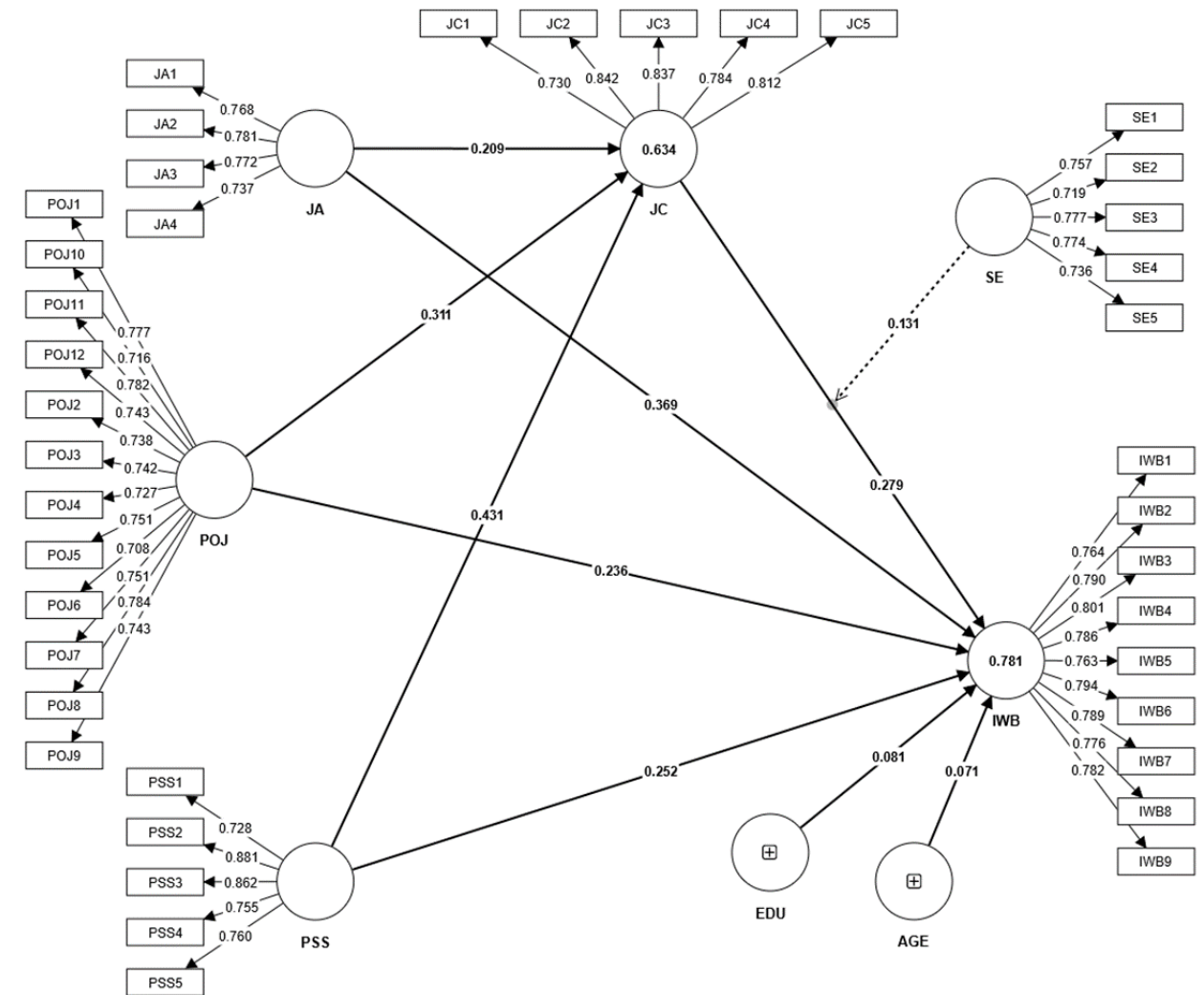


Figure 2: Measurement Model Assessment

Structural Model Assessment

The coefficient of determination (R2) for IWB was 0.781, indicating that Seafarer's job autonomy, perceived organizational justice, supervisor support, and job crafting explained 78.1% of the variance in IWB. The R2 for job crafting was 0.634, indicating that Seafarer job autonomy, perceived organizational justice, and supervisor support explained 63.4% of the variance in job crafting. R2 for IWB with sailing experience as

a moderator was 0.271, indicating that Seafarer's job autonomy, perceived organizational justice, supervisor support, job crafting, and sailing experience explained 27.1% of the variance in IWB.

Hypothesis Testing

The study hypotheses regarding the direct effects were supported (see Table 3). Seafarer's job autonomy significantly impacted IWB ($\beta=0.369$, $t\text{-value}=6.913$)

and job crafting ($\beta=0.209$, $t\text{-value}=3.443$), providing support for H1a and H2a. Similarly, perceived organizational justice significantly impacted IWB ($\beta=0.236$, $t\text{-value}=4.658$) and job crafting ($\beta=0.311$, $t\text{-value}=5.992$), providing support for H1b and H2b. Supervisor support also had a significant positive impact on IWB ($\beta=0.252$, $t\text{-value}=4.891$) and job crafting ($\beta=0.431$, $t\text{-value}=7.312$), providing support for H1a, and H2a, providing support for H1c and H2c. Furthermore, job crafting significantly impacted IWB ($\beta=0.279$, $t\text{-value}=5.120$).

Table 3. Direct Effects

Path	β -value	t-value	p-values
Seafarer's job autonomy→IWB	0.369	6.913	0.000
Perceived organizational justice→IWB	0.236	4.658	0.001
Supervisor support→IWB	0.252	4.891	0.000
Seafarer's job autonomy→Job crafting	0.209	3.433	0.004
Perceived organizational justice→Job crafting	0.311	5.992	0.000
Supervisor support→Job crafting	0.431	7.312	0.000
Job crafting→IWB	0.279	5.120	0.000

Note: * $p<0.05$, ** $p<0.01$

Mediation Hypotheses

We also examined the indirect impact of the Seafarer's job autonomy, perceived organizational justice, and supervisor support on IWB through job crafting. Our hypotheses regarding the indirect effects were also supported. Seafarer's job autonomy ($\beta=0.199$, $t\text{-value}=4.14$), perceived organizational justice ($\beta=0.275$, $t\text{-value}=5.610$), and supervisor support ($\beta=0.259$, $t\text{-value}=5.443$) had a significant positive impact on IWB via an underlying mechanism of job crafting, hence, supporting H4 a, b, and c (See Table 4).

Table 4. Mediation Analysis Results

Path	B-value	t-value	p-value
Seafarer's job autonomy→Job crafting→IWB	0.199	4.140	0.006**
Perceived organizational justice→Job crafting→IWB	0.275	5.614	0.000*
Supervisor support→Job crafting→IWB	0.259	5.443	0.000***

Note: * $p<0.05$, ** $p<0.01$, *** $p<0.001$

The results indicate that Seafarer job autonomy, perceived organizational justice, and supervisor support had significant positive direct effects on IWB, supporting hypotheses 1a, 1b, and 1c, respectively. Supporting Hypotheses 2a, 2b, and 2c, the job autonomy, perceived organizational justice, and supervisor support of seafarers had significant positive direct effects on job crafting.

Moderation Analysis

An examination of the moderating effect of sailing experience on the relationship between job crafting and IWB was conducted using a moderation analysis. The interaction term (job crafting x sailing experience) was added to the structural model, and Table 5 revealed a significant positive interaction effect ($\beta=0.131$, $t\text{-value}=2.355$, $p<0.05$), suggesting that sailing experience moderates the relationship between job crafting and IWB. Specifically, mariners with greater sailing experience had a stronger relationship between job crafting and IWB.

Table 5. Moderation analysis results

	β	t-value	p-value
Job crafting	0.279	4.877	<0.001
Exp	0.211	3.739	>0.05
JC x Exp	0.131	2.355	<0.05

Note: Exp refers to sailing experience, JC x Exp refers to the interaction effect between job

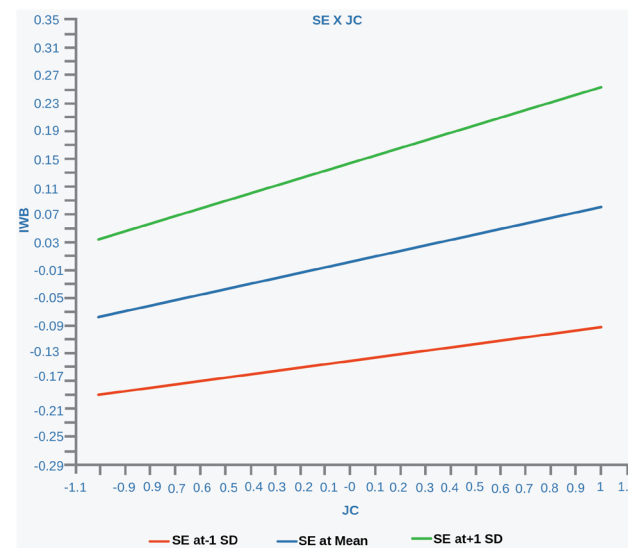


Figure 3. Interaction Plot

Figure 3 illustrates the interaction effect of job crafting experience and sailing experience on IWB. The x-axis indicates sailing experience, whereas the y-axis indicates job crafting and IWB standard values. One line represents modest levels of job crafting, while the other represents high levels. The solid line depicts the correlation between sailing experience and IWB for sailors with low levels of job crafting. In contrast, the dashed line shows the correlation for sailors with high levels of job crafting. The plot demonstrates that for sailors with modest levels of job crafting, sailing experience, and IWB are positively correlated. As sailing experience grows, IWB tends to increase as well.

5. Discussion and Conclusion

The study discovered that job autonomy, perceived

organizational justice, and supervisor support all positively impacted IWB among mariners. According to previous research studies (Sørli et al., 2022), this supports the notion that job autonomy can encourage creativity and innovation. Similarly, sailors who perceive their organization as fair and just are more likely to engage in innovative behaviors, consistent with previous research demonstrating a positive relationship between organizational justice perceptions and IWB (Bolger & Walters, 2019). In addition, studies have shown that supervisors who provide the necessary resources, encouragement, and recognition can cultivate IWB (Mori et al., 2022).

In addition, the study found that Seafarers' job autonomy, perceptions of organizational justice, and supervisor support had a significant positive effect on job crafting. This is consistent with previous research indicating that job autonomy can encourage employees to tailor their jobs to their requirements and preferences (Yuen et al., 2021). Workers are more likely to engage in job crafting when they have autonomy and control over their work duties. These results corroborate the positive association between job crafting and IWB among sailors. Mariners can redesign their job tasks, interactions with others, and perceptions of their work by engaging in job-crafting activities to foster innovation. For instance, sailors may seek new training opportunities or collaborate with coworkers on initiatives that test their current knowledge and abilities.

Additionally, job crafting allows sailors to match their personal preferences and capabilities with their work requirements and resources. When sailors have a better fit between their job requirements and personal preferences and strengths, they are more likely to experience positive emotions such as enthusiasm, enjoyment, and engagement, which can contribute to greater creativity and innovation. Consequently, job crafting can be viewed as a means for mariners to maximize their work experiences and innovative potential.

In addition, the finding that job crafting mediates the relationship between Seafarer's job autonomy, perceived organizational justice, and supervisor support for IWB lends support to the idea that employees actively shape their work environments to better suit their needs and preferences (Zhang & Parker, 2022). This emphasizes the significance of empowering employees to take charge of their work environments and implement changes that enable them to be more creative and innovative (Omar et al., 2022). By allowing employees to tailor their work to

their specific requirements and interests, job crafting may foster creativity, initiative, and learning, which are crucial innovation drivers for businesses. The findings highlight the importance of establishing a supportive work environment that encourages employees to shape their work tasks and relationships actively (Wang, 2022). By recognizing the value of job crafting and providing resources and opportunities for employees to engage in this process, organizations can improve the well-being and productivity of their employees as well as their innovation and competitiveness.

The results of the moderation analysis revealed that sailing experience significantly moderates the relationship between job crafting and IWB. This study extends the findings of previous research that asserted the significance of experiences as predictors of innovative behavior (Purwanto, 2022) by demonstrating the interactive impact of sailing experience and job crafting on IWB. This study's findings are especially relevant for sailors who operate in a demanding and ever-changing environment. Their line of work necessitates perpetually adapting and innovating to meet job requirements. The finding that job crafting can result in IWB among seafarers underscores the significance of empowering employees to take charge of their work and make the necessary adjustments to meet job demands.

6. Theoretical Implications

This research has significant ramifications for the disciplines of resource management and the maritime industry. First, the study offers empirical support for the widely accepted Job Demands-Resources (JD-R) model, which asserts that job resources such as job autonomy, perceived organizational justice, and supervisor support can positively influence employees' job-creating behaviors. In addition, the study demonstrates that job crafting is a key mechanism through which job resources can influence IWB, thereby providing support for the job demands-resources-employee outcomes (JD-R-O) model. Second, the research contributes to the existing literature by establishing a positive correlation between job crafting and IWB. It highlights the significance of job crafting as a generator of IWB and the potential of employees' self-initiated crafting efforts to foster innovation and creativity at work.

Thirdly, the study emphasizes the significance of individual differences in the influence of job crafting on the IWB of Seafarers. This relationship is moderated by sailing experience, suggesting that employees with more sailing experience are likelier to engage in job-crafting behaviors that facilitate IWB. This

finding has significant ramifications for selecting and training employees with the potential to drive workplace innovation and creativity. Finally, the study's implications for managers and organizations are significant. The study suggests that supervisors provide employees with job resources that facilitate IWB. When designing interventions to promote job crafting and IWB among employees, the findings suggest that organizations should consider individual differences, such as personality traits. By doing so, organizations can maximize the innovation and creativity of their employees, ultimately contributing to their success and sustainability.

7. Practical Implications

The current study has multiple implications for organizations. The study highlights the significance of job design, supervisor support, and the perception of organizational fairness in enhancing IWB among sailors. Therefore, organizations should prioritize providing a conducive work environment in which seafarers feel supported by their supervisors and perceive a fair distribution of organizational resources. In addition, organizations should encourage job crafting among sailors by allowing them to modify their work duties and roles based on their preferences and skills. The study also suggests that interventions focusing on job crafting behaviors can effectively maximize the positive effects of job autonomy, perceived organizational justice, and supervisor support on IWB. Organizations can promote IWB among sailors by providing training programs that enhance job crafting skills and by encouraging employees to take an active role in designing their work assignments.

In addition, the study indicates that an equitable work environment that encourages supervisor support is required to increase IWB's influence. Organizations ought to prioritize the development of a culture that recognizes and rewards IWB and encourages supervisor support. The study concludes by emphasizing the significance of adapting interventions to individual differences. The association between job autonomy and job crafting is stronger among seamen who perceive greater supervisor support. Therefore, interventions designed to encourage job-crafting behaviors should be tailored to employees' perceptions of supervisor support. Thus, this study provides practical implications for organizations seeking to improve IWB among seafarers by capitalizing on the positive impact of job resources, comprehending the boundary conditions of supervisor support, and tailoring interventions based on individual differences.

8. Limitations and Future Research Direction

Despite the significance of this study's findings, it is essential to acknowledge some limitations that may limit their applicability. The context in which the study was conducted, which was limited to mariners in a naval organization, is a limitation. Future research could investigate the applicability of these findings to other industries and settings. In addition, self-reported measures may have introduced common method bias, which should be considered in future studies. Future research could employ multi-source data acquisition techniques, such as supervisor ratings or peer evaluations, to circumvent this limitation. Thirdly, only the direct and indirect effects of job autonomy, organizational justice, and supervisor support on IWB were investigated. Future research could investigate other potential influences on IWB, such as organizational culture, leadership styles, and individual factors, such as personality attributes. This study did not investigate the impact of other potential moderators, such as organizational size or technological development, on IWB projections. Future research could investigate these potential moderators to further our comprehension of the relationship between job crafting and IWB.

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