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The Role of Career Path and Achievement Motivation in Organizational Sustainability from an Entrepreneurship Perspective

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ABSTRACT

This study examines the effect of career path and achievement motivation on organizational sustainability, mediated by innovative work behavior and moderated by perceived organizational support. Participants were all indirect employees of an international manufacturing group in Japan, Australia, and Indonesia totaling 4462 employees, of whom 256 were selected. Data were collected using research instruments distributed to all employees in three languages using a back-translation system. **Simple mediation and moderation** regression analysis techniques using structural equation modeling with Partial Least Squares 3.0 program were used. **The results** indicate that CP, AM, and IWB have positive and significant effects on OS. IWB mediation had a positive and significant effect on the mediation of CP and AM on OS. The moderating effect of POS on IWB had a positive and significant effect on OS. The significance of moderation is clarified based on the slope analysis, in which the greater the POS toward IWB, the stronger the support for OS. The study is novel in its use of POS as a moderating variable. This study enriches the theoretical and practical implications of managing employees CP and AM toward OS.

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1. INTRODUCTION

Amidst the rapid globalization and transformation occurring in various industrial sectors, sustainability has become an increasingly pressing issue for companies worldwide [1]. Sustainability does not focus only on one aspect of the economy (profit), the environment (planet), or society (individuals). Rather, it encompasses all aspects [2]. International manufacturing companies face major challenges in managing operations globally; as such, they should integrate sustainability practices into their strategies and policies to remain competitive and relevant in a market that is increasingly focusing on sustainability [3, 4]. Additionally, the importance of the Human Resource (HR) function in building organizational sustainability (OS) is being increasingly recognized. HR plays a role in recruiting and managing employees, and in designing a Career Path (CP) that supports the company long-term sustainability goals [5].

Thus, this study focuses on the problems that occur in international manufacturing company groups related to social aspects, especially concerning HR management [6]. We administered a pre-survey to the employees of an international manufacturing company group, finding that CP was considered important by 72%

of the employees. Seventy percent considered CP as an opportunity to become prosperous [7, 8]. However, only 35% of the employees responded that their CP was in accordance with their expectations; 58% said CP motivated them to work innovatively [9, 10]. Other results revealed that employees do not realize that their Achievement Motivation (AM) will support OS. Over 50% of the employees felt that their AM was not supported by the company, and most understood that the company development requires positive contributions and innovation from employees (83%); 65% stated that in working, orienting toward the future and having a growth mindset are necessary [11]. These results indicate that in practice, CP has not been optimally implemented by the company to align the HR strategy with the company global business strategy or employee welfare [12]. CP lacks a transparent mechanism, and many employees continue to believe that they do not receive the recognition they deserve [13].

It was also noted that problems arise because the employees AM is not visible, as it is not recognized that having employees with AM is connected to the organization sustainability [14]. This study explores the relationship between Career Path (CP), Achievement Motivation (AM), and Innovative Work Behavior (IWB) in achieving organizational sustainability (OS), while considering Perceived Organizational Support (POS) as a moderating factor [15]. The focus of this study is to identify factors that can link individual goals with corporate goals, especially in the context of international manufacturing companies, where alignment between personal and organizational objectives is essential for sustainable performance [16, 17]. A deeper understanding of how CP management and AM can be optimized to support sustainability goals can significantly contribute to both theory and practice [18]. The current findings can provide recommendations for companies in designing HR policies that are more aligned with their sustainability goals, while simultaneously creating a work environment that motivates employees to excel and innovate, thereby supporting OS [19]. Our study highlights the core capacities of CP and AM, which play a critical role in supporting organizational sustainability through mechanisms that fulfill human needs and drive achievement-oriented behavior [20, 21].

To emphasize the novelty of using Perceived Organizational Support (POS) as a moderating variable in this study. While POS has been extensively examined in the context of motivation and innovation, its role as a moderator between Innovative Work Behavior (IWB) and Organizational Sustainability (OS) within international manufacturing companies remains underexplored. Therefore, this study offers a novel theoretical and empirical contribution by highlighting POS function in that specific pathway [22]. This approach can elucidate our understanding of how a better alignment between organizational and individual goals can be achieved. To clarify the novelty of the research by emphasizing the use of Perceived Organizational Support (POS) as a moderator variable in the context of cross-country international manufacturing companies [23, 24].

2. LITERATURE REVIEW

The modern concept of sustainability, as noted by, involves a deep integration of the environmental, social, and economic dimensions [25]. The environmental dimension is concerned with preserving and protecting natural resources and reducing negative impacts on the environment [26]. The social dimension involves social justice, community empowerment, and social welfare development, which includes paying attention to human rights, reducing social inequality, and improving the well-being of individuals and communities [27]. The economic dimension focuses on economic sustainability, which measures financial returns and innovation, an equitable distribution of wealth, and the ability of organizations to survive in the long term without damaging the environment or society [28].

The Sustainability Triple Bottom Line (TBL) is a popular approach that combines three dimensions people, planet, and profit relevant to sustainability. In addition, introduced sustainability as a systemic transformation, highlighting the importance of innovation and adaptation for sustainability, and an organizational culture that supports sustainability and network-and relationship-based approaches [29]. In line with the OS problems faced by international manufacturing groups, this understanding of CP and AM can create a space in which employees can express creative and innovative ideas regarding the challenges of OS. For a participatory and collaborative culture, organizations should create an environment that encourages cross-functional collaboration and participation at all employee levels in decision-making processes related to sustainability [30]. Empowering individuals and teams requires employees to feel valued and empowered to change the way they work, to contextualize the findings within the evolving trends of sustainable HRM and strategic innovation [31, 32].

CP is an important concept in HR management, and is related to individual career development within

an organization. Several studies, including those by, provide varying perspectives on CP. Define CP as a series of stages or positions that allow individuals to advance within an organization through promotions or role shifts, or skill development [33]. They emphasize the importance of clear and structured career planning in the organization to help individuals achieve their best potential, as well as the importance of management that supports this career development process. Main constructs include:

- Career Planning.
- Development Facilitation.
- Alignment with Organizational Needs.

In line with the OS problems faced by international manufacturing groups, this study is needed to explore how alignment between organizational and individual goals can be attempted, even with the company focus on the needs of the organization [34]. However, CP is now more flexible and adaptive, emphasizing continuous competency development, nonlinear career mobility, and work life balance [35]. A career is seen as a dynamic journey that allows individuals to manage experiences and skills in various roles or projects that vary according to organizational needs and changes in the labor market [36]. Motivation drives human activities, including work. AM is a complex problem in organizations because the needs and desires of each member are different, considering each is biologically and psychologically "unique," developing based on a different learning process [37]. It is important for managers to know what motivates their employees or subordinates, as this factor determines the course of the organization in achieving its goals. stated that individuals with high AM tend to perform better, are goal oriented, and can significantly contribute to innovation in organizations [38]. show that AM improves individual performance and affects the organization ability to adapt to market and technological changes, which is critical for sustainability. In manufacturing companies, most employees know that AM is needed to support OS; they mention that they often produce creative ideas [39].

However, there is little support from the company for their ideas, which hinders OS development. To study this phenomenon, this study refers to the McClelland Achievement Theory, which states that employees have energy reserves that can be released. How this energy is released (or used) depends on the strength of the individual drive, situation, and opportunities available [40]. McClelland grouped three human needs that can drive AM: achievement, affiliation, and power. Individuals with high achievement needs seek measurable challenges and clear feedback to improve their performance. Based on the understanding of the above explanation, it can be stated that AM drives individuals to achieve high goals and standards through effort, challenges, and self development [41]. The IWB is fundamental for improving organizational performance. According to, IWB is not only the result of ideas that emerge occasionally; rather, it is a continuous process that includes a series of steps to develop and implement new ideas [42]. In this context, innovative behavior is both about creating new ideas and about how these ideas are accepted, developed, and realized in practice. [43] describes the three dimensions for measuring innovative behavior in the workplace used in this study, including:

- Creating ideas (idea generation).
- Sharing ideas (idea promotion).
- Idea realization.

Employees can recognize problems that occur in an organization and create new useful ideas or solutions [44]. Employees share these ideas with colleagues so they can be accepted. Additionally, they gather support, so the idea has the power to be implemented and realized in the organization. Employees convert the prototype or model of the idea into a real product and work process so it can be applied to the scope of work, groups, or the organization as a whole to increase efficiency. This shows how an IWB in a group of internal manufacturing companies can support an OS [45]. Based on the studies described above, the IWB plays an important role in mediating the relationship between CP, AM, and OS. Individuals with IWB tend to be more capable of making creative contributions, which encourages CP and increases AM. This supports the organization continued adaptation, development, and achievement of its long-term goals, thus supporting the OS as a whole. The IWB also encourages a progressive and collaborative work culture, which is important for maintaining an organization competitiveness and sustainability [46]. Therefore, we used the IWB as a mediator between CP and AM for OS [47].

POS refers to the extent to which employees believe the organization cares about their well-being and supports the achievement of their individual goals. High organizational support can increase AM and strengthen IWB [48]. Employees who feel supported by the organization will be more motivated to achieve and more likely to exhibit IWB, which contributes to OS. For example, found that POS can strengthen the relationship between AM and IWB, and moderate the positive impact of clear CP on OS. POS also plays an important role in creating an environment conducive for collaboration and experimentation, which are essential for sustainable innovation [49]. A theoretical model that combines CP, AM, IWB, and POS can provide deeper insights into how these factors work together to achieve OS. developed a model suggesting that clear CP and high AM facilitate IWB, which ultimately contributes to the achievement of OS goals. POS moderates this relationship by increasing employees desire to innovate, and commitment to the organization long-term goals.

3. MATERIALS AND METHODS

Participants were all indirect employees of an international manufacturing group in Japan, Australia, and Indonesia, totaling 4462 employees, of whom 256 were selected [50, 51]. Data for this study were collected from 256 permanent employees of an international manufacturing group in Japan, Australia, and Indonesia. The study has been approved by the head of the doctoral management program at our university and provided a cover letter requesting research to the related company [52]. And official written permission for data collection and distribution of questionnaires was received by the author from the deputy general manager of HC of the company in response to the cover letter from the university. Ethical approval was obtained from the Doctoral Program in Management, Faculty of Economics and Business at our university (No: XXX). Questionnaires were distributed outside working hours to respondents, with the same number of respondents in each country (n = 125) [53, 54]. Of the 375 employees, at least 224 (5% of the total 4,462 employees) were expected to be usable for data processing. Finally, 256 questionnaires were returned 125 Indonesian, 69 Japanese, and 62 Australian [55]. This total met the minimum number, and all responses were considered. Most respondents were at the managerial/assistant manager level (n = 146, 57%), had a bachelor degree (58%), and had worked in the company for more than 10 years (47%). Participants demographics are displayed in Table 1.

Table 1. Recapitulation of Respondents

Country	Position					Educational			Length of service		
	ASS	**MGR**	**DGM**	**GM**	**SMA**	**D3**	**S1**	**S2**	>10	10	<10
JPN	41	19	7	2	8	17	44	0	33	8	28
The statistical significance of the path coefficients strengthens the proposed hypotheses. (n = 69)	**59%**	**28%**	**10%**	**3%**	**11%**	**25%**	**64%**	**0%**	**48%**	**12%**	**40%**
AUS (n = 62)	27	25	6	4	6	0	49	7	27	6	29
	44%	**40%**	**10%**	**6%**	**10%**	**0%**	**79%**	**11%**	**43%**	**10%**	**47%**
INA (n = 125)	78	30	9	8	47	15	56	7	60	30	35
	62%	**24%**	**7%**	**7%**	**38%**	**12%**	**45%**	**5%**	**60%**	**30%**	**35%**
Total (n = 256)	146	74	22	14	61	32	149	14	120	44	92
	57%	**29%**	**8.5%**	**5.5%**	**24%**	**13%**	**58%**	**5%**	**47%**	**17%**	**36%**

Employees were informed that participation was voluntary, and their privacy, anonymity and confidentiality would be assured [56, 57]. And the authors have obtained written approval from the group companies to distribute the questionnaire and conduct the study. For the questionnaire, an ordinal scale was used, which can be used to determine the response to a statement from one of five variables, Strongly Agree, Agree, Agree Less, Disagree, and Strongly Disagree.

Data were divided into primary and secondary categories based on the source. Primary data were obtained through the survey (including a pre-survey) questionnaires, which were created using Google Forms [58]. Because respondents were across three countries, the questionnaire was translated into three languages, based on the countries. Two bilingual experts tested the accuracy of the translation using back-translation [59].

Secondary data related to the research were collected from literature, articles, books, journals, and websites .

This study used a comprehensive analysis technique for all variables in the multivariate analysis stage [60]. To simplify the explanation of the SEM methodology to make it more accessible to general readers. This was performed using a Structural Equation Model (SEM) comprising two parts: 1) the measurement part (outer model), which connects the observed variables to latent variables through a confirmatory factor model, and 2) the structural part (inner model), which connects the construct variables through a system of simultaneous equations [61]. Estimation of model parameters was conducted via the maximum likelihood estimation method. To analyze the influence of CP and AM on OS with the mediation of IWB and moderation of POS in international manufacturing industry companies, an SEM analysis was performed using the partial least squares (PLS) 3.0 program to test the validity and reliability of each item in the questionnaire. This SEM-PLS analysis is presented in three parts: the outer model test, inner model test, and hypothesis test [62]. To add a more detailed explanation of the limitations of using Partial Least Squares Structural Equation Modeling (SEM-PLS) and how the results might differ if alternative statistical methods were applied [63].

In connection with the use of SEM-PLS, the hypothesis test uses the t-test and probability value test (p-value). The t-test compares the t-statistics value with the critical t-value (1.96) The meaning of significance (t-test and probability value test) was used to test whether the relationship that occurs in the sample also applies to the population [64]. If the relationship is significant, then the conclusion of the sample can be generalized to the population, and the relationship in the population would also be significant. Accordingly, the t-test results were as follows:

- Ho: t count $<$1.96, indicating no significant relationship between the independent and dependent variables.
- H1: t count $>$1.96, indicating a significant relationship between independent and dependent variables [65].

Moreover, the probability value (p-value) was compared with an alpha value of 0.05. The p-value test results were as follows:

- Ho: p-value $>$ 0.05, indicating that there was no significant relationship between the independent and dependent variables.
- H1: p $<$ 0.05, indicating a significant relationship between the independent and dependent variables.

4. RESEARCH METHODOLOGY

This study comprehensively investigates the influence of Career Pathing (CP), Achievement Motivation (AM), Innovative Work Behavior (IWB), and Perceived Organizational Support (POS) on Organizational Sustainability (OS) within the context of international manufacturing firms. Specifically, CP and AM are hypothesized to exert both direct and indirect effects on OS, with IWB serving as a mediating mechanism that translates individual capabilities and aspirations into innovative practices contributing to long-term sustainability. Furthermore, POS is posited as a moderating variable, strengthening the relationship between IWB and OS by fostering a supportive organizational climate that encourages risk taking, creativity, and proactive behavior [66]. Grounded in extensive theoretical and empirical literature, the study underscores the vital role of structured career development opportunities and intrinsic achievement drive in shaping employee behavior that aligns with sustainable organizational outcomes. CP facilitates alignment between individual growth trajectories and corporate goals, while AM acts as a psychological catalyst for high performance and persistence in achieving excellence. IWB, positioned as a behavioral bridge, enables the generation, promotion, and realization of novel ideas that are essential for adaptive and sustainable operations. Simultaneously, POS enhances employees psychological safety and commitment, ensuring their full engagement in innovation related activities.

This conceptual framework is closely aligned with the Triple Bottom Line (TBL) paradigm people, planet, and profit by demonstrating how a combination of individual and organizational factors collectively foster sustainability across economic, environmental, and social dimensions. Through the integration of Career Pathing (CP), Achievement Motivation (AM), Innovative Work Behavior (IWB), and Perceived Organizational Support (POS), the model captures the multifaceted mechanisms by which organizations can achieve long-term viability. CP and AM empower employees individually, while IWB translates their competencies into

innovative outcomes, and POS ensures the presence of a nurturing environment that supports continuous engagement. Altogether, these elements synergize to drive economic viability through enhanced performance and innovation, promote environmental stewardship through adaptive and efficient practices, and reinforce social responsibility by cultivating a supportive and inclusive workplace culture. The integrated model thus offers a comprehensive and dynamic lens to understand how these interconnected factors contribute to resilient and sustainable organizational performance, as visually illustrated in Figure 1.

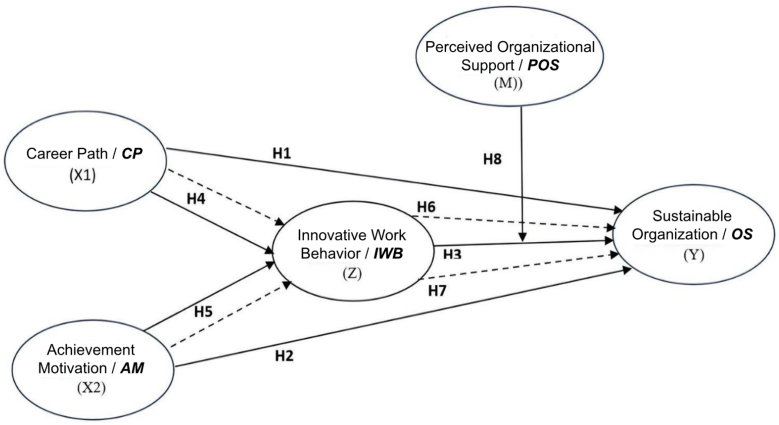

Figure 1. Model of Career Path and Achievement Motivation Toward Organizational Sustainability

Measurement of variables utilized multifactor questionnaires with strong reliability and validity. CP was measured through dimensions like career fairness, awareness of opportunities, and career satisfaction (Cronbach alpha 0.913). AM was assessed on achievement, affiliation, and power needs (alpha 0.905). IWB covered idea generation, promotion, and realization (alpha 0.882). POS included fairness, superior support, and organizational rewards (alpha 0.826). OS measurement encompassed governance, leadership, culture, and information systems (alpha 0.953). All constructs showed acceptable average variance extracted (AVE), composite reliability (CR), and factor loadings above 0.70, confirming convergent validity and internal consistency. The detailed reliability and validity results are summarized in (Table 3).

Table 2. Discriminant Validity according to the Fornell-Larcker Test

	AM	**CP**	**IWB**	**OS**	**POS**
AM	0.916				
CP	0.354	0.862			
IWB	0.347	0.420	0.900		
OS	0.318	0.369	0.349	0.883	
POS	**-0.142**	**-0.126**	**-0.116**	**-0.067**	0.784

The model structural validity was confirmed through tests including discriminant validity (Fornell Larcker and HTMT criteria), multicollinearity (VIF < 3), coefficient of determination (R^2), effect size (f^2), and predictive relevance (Q^2). CP and AM together explained 22.1% of variance in IWB, while CP, AM, IWB, and POS jointly explained 25.9% of variance in OS. Effect sizes were small but significant for most relationships, and predictive relevance values indicated moderate model power. These statistical results, presented in Table 2 and Table 3, affirm the suitability of the PLS model to analyze the hypothesized relationships in this study.

Table 3. HTMT between Latent Constructs

	AM	**CP**	**IWB**	**OS**	**POS**
AM					
CP	0.389				
IWB	0.388	0.467			
OS	0.339	0.392	0.379		
POS	0.181	0.194	0.187	0.083	

5. EMPIRICAL RESULTS

The following section presents the variance-based SEM method, which was applied to test the hypotheses, and its analysis through PLS path modeling. The significance of the path coefficients in this study was determined using the bootstrapping method; 256 samples were selected, and a structural model was created. The variance-based SEM model used in this study is shown in Figure 2. Shows the statistical significance between standardized regression coefficients and latent variables, and between latent variables and t-values in the research model. Table 4 presents the path coefficients of the research models.

In the first stage, the significance of the path coefficients, t-statistics, and P values was calculated by testing the research model. Table 4 shows that CP supports H1, based on OS (0.282; 5.338; 0.000); AM supports H2, based on OS (0.195; 4.463; 0.000); IWB supports H3, based on OS (0.194; 2.604; 0.005); CP supports H4, based on IWB (0.339; 6.357; 0.000); AM supports H5, based on IWB (0.227; 3.987; 0.000); CP supports H6, based on OS mediated by IWB (0.066; 2.279; 0.023); the magnitude of the influence of CP mediated by IWB on OS was 0.066. A positive path coefficient indicates that the higher the employee CP, the higher the IWB, which increases the OS level. In addition, CP supports H7 based on OS mediated by IWB (0.044, 1.982, 0.048). Further, the magnitude of the influence of AM mediated by IWB on OS was 0.044. A positive path coefficient indicates that the higher an employee AM, the higher the IWB, which increases OS level.

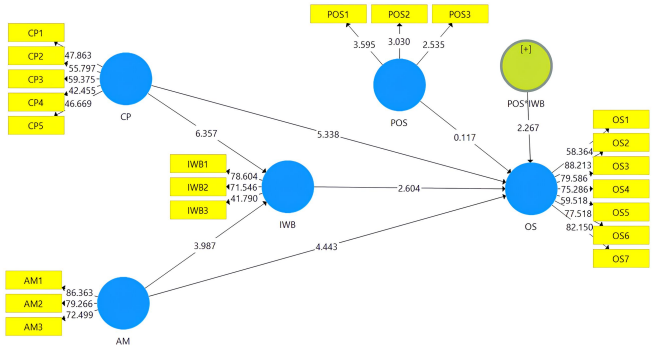

Figure 2. The Influence of Career Path and Achievement Motivation on Organizational Sustainability with Mediation of Innovative Work Behavior

Figure 2 illustrates the structural model assessing the influence of Career Path (CP) and Achievement Motivation (AM) on Organizational Sustainability (OS), with Innovative Work Behavior (IWB) serving as a mediating variable and Perceived Organizational Support (POS) as a moderating variable. The figure shows that CP and AM significantly influence IWB (path coefficients = 6.357 and 3.987, respectively), and IWB, in turn, significantly affects OS ($\beta = 2.604$). POS also directly influences OS ($\beta = 0.117$), and its interaction with IWB (POS*IWB) significantly moderates the relationship between IWB and OS ($\beta = 2.267$), supporting the hypothesized moderation effect. The standardized factor loadings of all indicator variables (CP1–CP5, AM1–AM3, IWB1–IWB3, POS1–POS3, and OS1–OS7) are also shown, indicating good measurement validity. Overall, this figure visualizes the hypothesized model and confirms the significant mediating role of IWB and moderating role of POS in enhancing organizational sustainability.

Table 4. Recapitulation Influence Test Results

Hypotheses	Path coefficient	T	P	Hypotheses Result
(H1) CP → OS	0.282	5.338 (> 1.96)	< .001	H1 Supported
(H2) AM → OS	0.195	4.443 (> 1.96)	< .001	H2 Supported
(H3) IWB → OS	0.194	2.604 (> 1.96)	.005	H3 Supported
(H4) CP → IWB	0.339	6.357 (> 1.96)	< .001	H4 Supported
(H5) AM → IWB	0.227	3.987 (> 1.96)	< .001	H5 Supported
(H6) CP → IWB → OS	0.066	2.279 (> 1.96)	.023	H6 Supported
(H7) AM → IWB → OS	0.044	1.982 (> 1.96)	.048	H7 Supported

Source: processed data (2024)

The results of the hierarchical moderation regression analysis, as presented in Table 5, provide empirical support for H8, which posits that Perceived Organizational Support (POS) moderates the relationship between Innovative Work Behavior (IWB) and Organizational Sustainability (OS). The interaction term between IWB and POS was found to be statistically significant (t = 2.267, p = .024), indicating that the strength of the relationship between IWB and OS varies depending on the level of POS perceived by employees. To visualize this interaction, the slope of IWB on OS was plotted at three different levels of POS, as shown in Figure 3. The graph reveals a clear moderating pattern. When POS is at an average level (represented by the blue line), the relationship between IWB and OS is positive, with a slope of approximately 0.2. This suggests that even moderate levels of perceived support from the organization can enhance the impact of employee innovation on sustainability outcomes.

Moreover, when POS is at a high level (green line), the positive relationship between IWB and OS becomes stronger, with a steeper slope of around 0.4. This indicates that in environments where employees feel highly supported, their innovative behaviors are significantly more likely to contribute to sustainable organizational achievements. Conversely, in conditions where POS is low or absent (red line), the relationship between IWB and OS is nearly flat, with a slope close to 0. This implies that without sufficient organizational support, the potential of innovative work behavior to drive sustainability is largely unrealized.

Table 5. Recapitulation of Test Results on the Effect of Moderation

	Path coefficient	**T**	**P**	**Path coefficient**
SPOS*IWB → OS	0.185	2.267 (> 1.96)	.024	H8 Accepted

Table 5 presents the results of the moderation analysis examining the interaction effect between Perceived Organizational Support (POS) and Innovative Work Behavior (IWB) on Organizational Sustainability (OS). The interaction term POS*IWB has a path coefficient of 0.185, with a T-value of 2.267, which exceeds the critical value of 1.96, and a p-value of 0.024. These results indicate that the interaction effect is statistically significant at the 5% significance level. Therefore, Hypothesis 8 (H8), which proposes that POS moderates the relationship between IWB and OS, is supported and accepted. This suggests that higher levels of POS strengthen the positive impact of IWB on organizational sustainability.

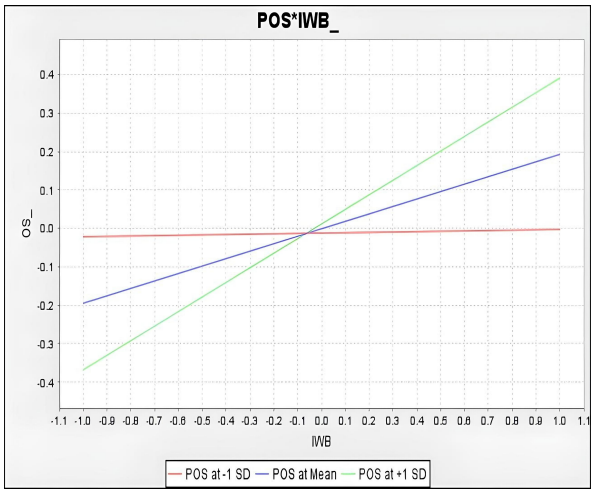

Figure 3. Interaction Effect of Innovative Work Behavior (IWB) and Perceived Organizational Support (POS) on Organizational Sustainability (OS)

Therefore, the results not only confirm H8 but also emphasize the critical role of organizational support in maximizing the effectiveness of innovation efforts toward sustainability. These findings highlight the importance of integrating interpretive commentary into the empirical results section to strengthen the theoretical and practical implications of the study's visual and statistical evidence.

6. DISCUSSION

6.1. CP in Connection with OS

The results show that CP is crucial for the employees of international manufacturing companies. With structured CP, organizations put greater importance on internal development and promotion, which reduces costs while retaining employees who have a deep understanding of the company culture and operations. Employees with clear CP feel encouraged to contribute innovative ideas that can improve the efficiency and competitiveness of the organization. The current results and review of the problems related to CP that occur in international manufacturing companies reveal that CP is a lesser concern for the company. It is not properly managed by the company to develop its HR. Most employees believe their career ladders are not in accordance with their expectations, and do not feel satisfied with their careers because they do not feel their career level is justified. This study presents the steps that should be taken to manage CP in line with the variable indicators used in this study fairness in career, attention to superiors, awareness of opportunities, employee interests, and career satisfaction. The bootstrapping results also show how the career ladder construct can be strengthened for proper career management. These results show that awareness of opportunities, attention to supervisors, and fairness in careers are the three indicators that contribute the highest results; therefore, these should be considered by international corporate groups.

6.2. AM in Connection with OS

The results also reveal that individuals with AM tend to work harder, and are more dedicated and innovative in achieving organizational goals. This can increase efficiency, reduce waste, and encourage the achievement of long-term goals that support OS. AM encourages people to make better and more efficient choices, which helps organizations survive and thrive in the long term. The current results revealed that employees did not realize that their AM would support OS, but felt that their AM was not supported by the company. The results present the steps that should be taken to maximize employee AM, in line with the indicators of the AM variables used in this study the need for achievement, affiliation, and atmosphere. Based on the bootstrapping results, we also see how this AM construct can be strengthened to maximize employees' AM. These results show that the need for achievement is an indicator that contributes the most to building OS; therefore, it is important for consideration by international manufacturing company groups.

6.3. IWB in Connection with OS

The results reveal that the IWB of employees to generate new ideas is still lacking, as are the company efforts to support employee IWB. The results present the steps that should be taken to maximize employee IWB, in line with the indicators of the IWB variables used in this study idea generation, promotion, and realization. Based on the bootstrapping results, we see how this IWB construct can be strengthened to maximize employees IWB. These results indicate that idea generation or idea creation contributes the most to building OS; therefore, these indicators require the attention of the international manufacturing company groups.

6.4. POS in Connection with IWB to OS

POS strengthens the relationship between IWB and OS. When an organization provides adequate support, employee IWB plays a greater role in achieving OS goals. The results also confirm that POS has a positive moderating effect. This means that organizations that provide more support to employees will be better able to optimize their innovation potential to achieve OS. Conversely, without adequate POS, even with IWB, its effect on OS may not be significant. Organizations should thus provide support through resources, training, and supportive policies that help employees develop and implement innovative ideas. The innovations produced would further the personal interests of employees and help achieve the organization's long-term goals. To elaborate how SEM-PLS results can be translated into actionable strategies for international companies.

7. MANAGERIAL IMPLICATION

The results of this study provide important managerial implications for managers and HR practitioners in international manufacturing companies. First, the significant influence of Career Path (CP) on Innovative Work Behavior (IWB) and Organizational Sustainability (OS) highlights the need for a more transparent, structured, and personalized career development system aligned with individual goals. Second, Achievement Motivation (AM) must be strengthened through recognition programs, challenging goal setting, and constructive feedback to encourage employees to contribute to innovation and long-term organizational objectives. Third,

the role of Perceived Organizational Support (POS) as a moderator between IWB and OS indicates that a supportive organizational climate through fairness, supervisory attention, and appropriate rewards can enhance the link between innovative behavior and sustainability outcomes. Lastly, the finding that IWB mediates the effects of CP and AM on OS underscores the need for HR strategies to integrate innovation capacity as a core element of career development and motivation systems to holistically support organizational sustainability.

8. CONCLUSION

This study found that Career Pathing (CP) and Achievement Motivation (AM) positively affect Organizational Sustainability (OS) and Innovative Work Behavior (IWB). Perceived Organizational Support (POS) moderates the effect of IWB on OS, and IWB mediates the relationship between CP, AM, and OS. CP aligns individual and organizational needs by enhancing employee skills and awareness, while AM drives high performance and sustained effort. Supporting CP and fulfilling human needs for achievement are critical to OS. POS strengthens the influence of IWB on OS. These findings emphasize IWB role in driving innovation in digitalpreneurship and socialpreneurship and highlight how different POS conditions affect employee outcomes, improving alignment between organizational and individual goals.

Managers should prioritize the social aspect of OS development by integrating HR efforts with career development and AM support. Companies need to align their vision and mission with individual goals, ensuring employees clearly understand organizational objectives. HR should adopt inclusive career development strategies that facilitate effective performance through CP. Additionally, POS is essential in fostering IWB that supports sustainability. Organizations are advised to implement employee recognition systems and involve employees in decision-making to optimize OS. Flexible resource allocation based on POS can further enhance innovative behavior.

Future studies should deepen understanding of integrating employee and company goals with a sustainability focus, especially regarding career management and AM. Research should also explore cross cultural differences among countries like Indonesia, Japan, and Australia to understand cultural impacts on CP, AM, and POS. Lastly, further investigation into POS dimensions such as fairness, superior support, and feeling appreciated and their effects on POS perceptions is recommended to enrich insights on OS.

9. DECLARATIONS

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Conceptualization: IP; Methodology: IS; Software: KS; Validation: IP and IS; Formal Analysis: KS and LN; Investigation: IP; Resources: IS; Data Curation: IS; Writing Original Draft Preparation: KS and LN; Writing Review and Editing: KS and LN; Visualization: IS; All authors, IP, IS, KS, and LN, have read and agreed to the published version of the manuscript.

9.3. Data Availability Statement

The data presented in this study are available on request from the corresponding author.

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9.5. Declaration of Conflicting Interest

The authors declare that they have no conflicts of interest, known competing financial interests, or personal relationships that could have influenced the work reported in this paper.

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