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慶應義塾大学大学院経営管理研究科修士課程

学位論文（ 2022 年度）

論文題名

Conditional effect of FWA on organizational outcomes via inclusion climate: A mediated moderation approach

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論文要旨

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(論文題名)			
Conditional effect of FWA on organizational outcomes via inclusion climate: A mediated moderation approach			
(内容の要旨)			
<p>Due to the declining birthrate and aging population, the working population recedes, which stimulates organizations to employ people with diverse backgrounds. Organizations use a range of strategies to keep workers with different demands. One organizational approach used to manage a diverse workforce is flexible work arrangements (FWA). FWA has been described by Rau & Hyland (2002) as a work alternative that typically permits flexibility in terms of "where" and "when" work is accomplished. Employees may attain work-life balance with the help of FWA, which lowers stress, boosts engagement at work, and reduces the possibility that they'll abandon their employment. Examining if FWA promotes an inclusive workplace would help to clarify the link. Procedural justice is used as moderator since it reveals whether FWA is indeed operating fairly. Mediated moderation analysis is done using data collected via an online questionnaire, which consists of various job types with a total number of 1006 responses. The results show that inclusion climate significantly mediates FWA usage and work engagement. FWA promotes the idea that the company values its employees' individuality and actively supports their preferred working methods, which strengthens the feeling of community among the workforce. Employees who create a sense of belonging connect with the company, contribute to it, and aim to raise their own worth by improving the business's value. In other words, they improve work engagement while decreasing turnover intention. However, moderation of procedure justice was not significant. The results conclude that procedural justice has no effect on enhancing the relationship between FWA and work engagement through an inclusion climate.</p>			
Keywords diversity, FWA, inclusion climate, procedural justice, work engagement, turnover intention			

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1 Introduction

The workforce in the 21st century is characterized by the inclusion of more women, diverse ethnic backgrounds, alternative lifestyles, and generational differences than in the past (Roberson & Stevens, 2006). To retain employees with diverse needs, organizations implement a variety of practices. Accordingly, human resource management must also adapt to changes in the working population. Flexible Work Arrangements (FWA) is an example of organizational practices which manage a diverse workforce. Rau & Hyland (2002) has defined FWA as a work option that generally allows for flexibility in terms of "where" and "when" work is completed. Both scholars and practitioners have paid close attention to FWA, with widely differing perspectives on the perceived benefits of applying diverse human resource strategies inside organizations (Chen & Fulmer, 2018). According to previous studies, FWAs are linked to a number of favorable employee outcomes, such as reduced work-life conflicts, increased employee satisfaction, increased work engagement, and increased job performance (Bakker & Demerouti, 2007; Gajendran, Harrison, & Delaney-Klinger, 2015). When examining the link between FWA and conceptions of work engagement, empirical research has reported variable and inconsistent results (Allen et al., 2013). Although the advantages of engaged workers are extensively established, the drivers of employee engagement are still regarded indefinable and imprecise (Chen & Fulmer, 2017).

The current study makes two contributes to the existing FWA literatures. Firstly, the study applies self-determination theory and optimal distinctive theory to examine how inclusion climate with FWA affects work engagement and turnover intention. Viewed through the lens of self-determination theory, FWA is one of the means by which employees feel a sense of autonomy, eventually leading to work engagement. Moreover, FWA gives employees the chance to have a healthy work-life balance while still being a part of the company makes them feel that they are valuable to the organization. This leads to a greater sense of belonging, which also increases work engagement. The relatedness in a culture of inclusion leads to longer-lasting relationships and lower turnover intentions.

According to optimal distinctive theory (Brewer, 1991), individuals strive to create a balance between the drive to find resemblance and belonging with others and the need to preserve a distinct identity. Based on ODT, Shore et al. (2011) claim that the literature on inclusion highlights concepts of belonging and uniqueness. Furthermore, FWA is a uniqueness and belonging signal that allows workers to continue working for

the business regardless of their circumstances. The existence and implementation of FWA will improve the atmosphere of inclusion and boost work engagement.

Second, the study shed light on the impact of organizational fairness on the relationship between FWA and the inclusive environment. When employees think the FWA is effective and the organization has taken efforts to resolve their concerns, they sense procedural fairness for FWA use. This generates respect and pride in the psychological engagement model, which improves affiliation and sense of belonging to the group.

1-1 Diverse workplace and FWA

The practices which fulfill diversified work style is called Flexible Work Arrangement (FWA). FWA is defined as “alternative work options that allow work to be accomplished outside of the traditional temporal and/or spatial boundaries of a standard work day” (Rau & Hyland, 2002). Posserried and Plantenga (2011) note that in the study on FWA, the researchers discuss three broad categories: flexible scheduling (flexi-time), location (teleworking), and length of work (part-time). A Flexi-time system enables employees to work shorter hours or different work hours with their supervisor or other co-workers. Location flexibility relates to the place of work, meaning that employees work outside their physical organizational environment (Austin-Egole et al, 2020). Bailey & Kurland (1999) defined four types of telework, which are: home-based telecommuting, satellite offices, neighborhood work centers, and mobile working. Flexibility in working hours, which generally means shorter or longer working hours per week, associates best with the idea of compressed work (Austin-Egole et al, 2020). The use of time off can also be considered FWA, as it allows individuals to flexibly manage their work style. According to research, FWA is linked to a number of significant organizational attitudes and results. A meta-analysis of 31 research conducted by Baltes et al. (1999) discovered that flexible arrangements were associated with productivity and performance, job satisfaction, absenteeism, and satisfaction. However, job satisfaction alone is not enough to fully capture the uplifting energy present in companies where employees are prospering (Schaufeli & Bakker, 2004). According to Schaufeli and Bakker's model of an upward positive spiral, increased job engagement and self-efficacy result in better performance across the board, in both the work and family spheres.

1-2 Mediating mechanisms of inclusion climate

The connection between FWA and work engagement, as well as turnover might be deepened by investigating if FWA supports an inclusive work environment. Work engagement refers to a positive and fulfilling psychological state at work. Kahn (1990) first introduced the concept of engagement and conceptualized it as the utilization of organization members' self to their roles. With engagement, people utilize and express themselves physically, cognitively, and emotionally as they perform their work roles. Schuafeli et al. (2002) stated that work engagement is a condition of positive emotions and motivation featuring vigor, dedication, and absorption. Vigor refers to "a high level of energy and psychological recovery while at work," dedication stands for "strong involvement in the work, a sense of significance and pride in the work," and absorption implies "concentration and focus on work" (Schuafeli et al, 2002, p.74-75). Sonnentag et al. (2008) state that an important factor in work engagement is the ability to psychologically detach from work during non-work time. Psychological detachment typically includes people's social relationships and activities, such as socializing with friends or pursuing hobbies. FWA is likely to increase work engagement because it allows employees to spend time outside of work.

Self-determination theory (SDT) (Ryan and Deci, 2000) claims that when people's intrinsic motivation rises as a result of their level of self-determination, they feel more energized and fulfilled at work. Intrinsic motivation is encouraged by the satisfaction or fulfillment of three essential psychological needs: autonomy, competence, and relatedness (Deci & Ryan, 1985; Ryan & Deci, 2002). When these three basic psychological requirements are satisfied, individuals are driven to execute an activity genuinely, because they enjoy it and find it personally satisfying (Ryan & Deci, 2017). Vallerand et al. (2008) noted that in SDT, the environment is not considered in and of itself, but rather what it implies functionally in terms of supporting people's psychological needs. FWA satisfies the need for autonomy by giving employees control over when, where, and how they work, which increases one's sense of fulfillment and engagement at work. Fulfilling the needs of relatedness also increases intrinsic motivation.

A person's sense of relatedness is characterized as a sense of connection with another person or group of people. An employee will experience a sense of belonging to the company, if they believe that others in the business value their job. According to relatedness research, perceived relatedness influences one's level of engagement in the activity (Furrer & Skinner, 2003). Inclusion is the extent to which employees feel they are part of important organizational processes, such as impacting decision-making

processes, involvement in important workgroups, and having access to information and resources (Barak, 2008; Roberson, 2006). Previous literatures argue that the inclusion climate is composed of belonging and uniqueness which results in quality relationships with supervisors and group members (Chung et al, 2020). Because people are able to build more eternal relationships with others through inclusion climate, their relatedness needs are satisfied, resulting in motivated action and increased work engagement.

The reason why FWA enhances job engagement through an inclusive atmosphere is explained by optimal distinctive theory. Optimal distinctive theory (Brewer, 1991) proposes that humans are marked by two conflicting desires that govern the relationship between self-concept and social group membership. One is the need for assimilation, and the other is differentiation from others. The FWA itself is an indicator that embodies uniqueness and belongingness. FWA has implemented a way of working that is suitable for various situations depending on the person. This leads to the unique position of employees being recognized and respected. There is also a sense of belonging to the organization without being abandoned, as FWA allows employees to continue working for the organization despite their circumstances. Therefore, the existence and use of FWA will increase inclusion climate and then strengthen work engagement.

Hypothesis 1a: Inclusion climate mediates the FWA-work engagement relationship.

FWA also leads to lower turnover intention through an inclusion climate. Turnover intention is defined as the intention to leave an organization (Tett and Meyer, 1993). In one of the previous studies showing the effect of FWA on employee retention, Almer and Kaplan (2002) found that accounting professionals who transitioned to FWA had lower turnover intentions. According to SDT, People are able to meet their desire for relatedness in a culture of inclusion because it enables them to form longer-lasting relationships with others. As a result, they are more driven in work and have lower turnover intentions. According to the conservation of resources theory, individuals strive to retain, protect, and enhance resources (Hobfoll, 1989, p. 513). The resources include personal characteristics, objects, conditions, energy, etc. Individuals will experience psychological stress when resources are at risk of being lost, when resources are actually lost, or when resources are not expected to increase. FWA allows employees to maintain their resources by giving them control to reduce the effort and energy required when balancing their work and life. Given this theory's conception,

FWA is recognized as lowering the loss of resources and thus indirectly lowering employee turnover intentions (Kroll and Nuesch, 2019).

Hypothesis 1b: Inclusion climate mediates the FWA-turnover intention relationship.

1-3 Mediated moderation mechanisms of procedural justice

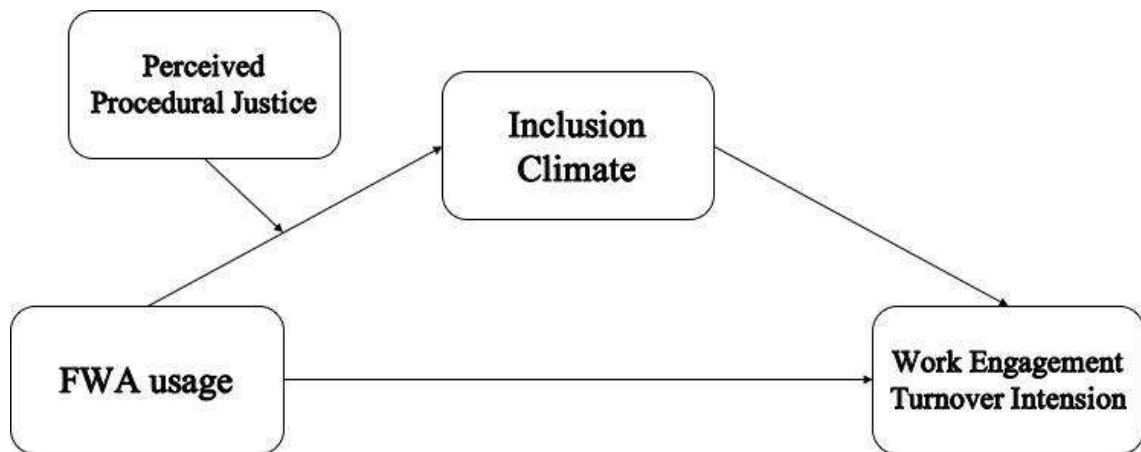
Perceptions of organizational justice impact the relationship between FWA and the inclusive environment. Organizational justice (also called organizational fairness) is composed of three types of fairness: procedural justice, distributive justice, and interactional justice (Cohen-Charash & Spector, 2001). In this study, the main focus was on procedural justice, which is the type of perceptions that employees have of the policies and procedures under which the organization operates. The focus was on procedural justice because procedural justice is a form of justice that is highly associated with organizational systems such as FWA. Employees perceive procedural justice for FWA use when they perceive that the FWA is functional and that the organization has developed measures for them. The psychological engagement model is regarded with respect and pride because employees feel valued and treated equally (Tyler & Blader, 2003). An increase in respect and pride within a group strengthens one's identification with that group and one's sense of belonging to it. Therefore, procedural justice perception is considered a moderator.

Hypothesis 2a: Perceived procedural justice moderates the positive and indirect effect of FWA on work engagement through inclusion climate, such that this indirect effect is stronger when higher procedural justice is perceived.

Hypothesis 2b: Perceived procedural justice moderates the negative and indirect effect of FWA on turnover intention through inclusion climate, such that this indirect effect is stronger when higher procedural justice is perceived.

To summarize briefly, this paper would like to clarify the process by which flexible work arrangements (FWA) affect inclusion climate and influence organizational outcomes through mediation analysis. However, predicting that mediation effects are not always constant and vary with the perception of procedural justice, thus entering procedural justice as moderators. The following model is considered in this paper.

Figure 1: Conceptual model of the study



2 Methods

2-1 Data collection procedure and participants

The 1006 participants were selected by an online survey company with a presence in Japan that had access to online panels, which are large samples of Japanese workers in various roles and occupations. The following three criteria were used to filter out respondents: (a) those who were regular, full-time workers at the time of the survey; (b) those who were middle managers; and (c) those who managed subordinates. The participants included 409 (40.7%) males and 597 (59.3%) females. Their average age was 37.16 (SD = 7.96). Data were collected through a three wave with two-week intervals online survey between November to December 2022. Scales written in English were translated into Japanese and back-translated to ensure that the meaning of the items was preserved (Brislin et al., 1973).

2-2 Measures

FWA usage. FWA usage was assessed by Allen's (2001) ten-item family-supportive benefit availability and use, however, adapted to fit the Japanese context. These include flex-time, work from home, telecommuting, reduced hours, parental leave, nursing care leave, in-house daycare center, three days off, exemption from overtime work, and staggered work hours. Respondents selected one of five responses for each item: 1) not offered but I don't need it; 2) not offered but I could use it; 3) offered but not used; and 4) offered and I use it; 5) I am not sure. The score for FWA usage was derived by scoring responses 1), 2), 3), and 5) as '0' and response 4) as '1'. Total FWA usage was computed by summing usage scores across all five items. The categorical nature of FWA usage scores makes the computation of reliability estimates irrelevant.

Inclusion climate. The climate of inclusion within workplace was assessed by Chung et al.'s (2020) workgroup Inclusion measure. Workgroup inclusion climate was measured by eight-item subscale. The sample items are "I am treated as a valued member of my work group" and "I can bring aspects of myself to this work group that others in the group don't have in common in with me." Participants responded to the items on a 5-point scale: 1) disagree; 2) slightly disagree; 3) could not say either; 4) slightly agree; 5) agree. The Cronbach's alpha for this scale was .95.

Turnover intention. Turnover intention was assessed by Shore, Newton, and Thornton (1990)'s measure. The intention to quit the job was assessed by a two-item subscale.

The items were “How likely is it that you will look for a job outside of this organization during the next year?” and “How often do you think about quitting your job at this organization?” Participants responded to the items on a 5-point scale: 1) disagree; 2) slightly disagree; 3) could not say either; 4) slightly agree; 5) agree. The Cronbach’s alpha for this scale was .66.

Work Engagement. Work engagement was measured by the Japanese version of Schaufeli et al.’s (2003) Utrecht Work Engagement Scale (UWES-9), which is validated and translated by Shimazu (2008). Participants’ work engagement was assessed by nine-item subscale. The sample items are “When I get up in the morning, I feel like going to work” and “I feel happy when I am working intensely.” Participants responded to the items on a 5-point scale: 1) disagree; 2) slightly disagree; 3) could not say either; 4) slightly agree; 5) agree. The Cronbach's alpha for this scale was .96.

Procedural justice. Procedural justice was measured by Colquitt (2015)’s full-range procedural justice scale. Perception of procedural justice was assessed by fourteen-item subscale. The sample items are “Are you able to express your views during those procedures?” “Do your views go unheard during those procedures?” “Can you influence the decisions arrived at by those procedures?” and “Do the decisions arrived at by those procedures lack your input?” Participants responded to the items on a 5-point scale: 1) disagree; 2) slightly disagree; 3) could not say either; 4) slightly agree; 5) agree. The Cronbach's alpha for this scale was .84.

3 Results

3-1 Correlation and descriptive statistics

Table 2 provides the descriptive statistics and correlations among the variables of the study.

Table 1: Descriptive statistics and correlations among variables

	Mean	SD	1	2	3	4	5
Gender	1.59	0.49					
Age	37.16	7.96					
1 FWA usage	–	–	–				
2 Inclusion	3.14	0.92	.19**	(.95)			
3 Procedural justice	3.02	0.59	.11**	.33**	(.84)		
4 Turnover intention	2.76	1.09	-.05	-.28**	-.26**	(.66)	
5 Work engagement	2.6	0.99	.12**	.41**	.29**	-.22**	(.96)

(Gender is coded as 1=Male, 2=female. No correlation value for gender and FWA usage as they are categorical variables. ** $p < .01$ * $p < .05$)

3-2 Hypothesis testing

Hypothesis 1a predicted the relationship between FWA and work engagement would be mediated by inclusion climate. Hypothesis 1b predicted the relationship between FWA and turnover intention would be mediated by inclusion. These hypotheses were tested by Baron and Kenny's (1986) four conditions for mediation and further confirmed the significance of indirect effects by PROCESS analysis (Hayes, 2022). Mediation is supported when the following conditions are met: (1) the predictor is significantly related to the dependent variable; (2) the predictor is significantly related to the mediator; (3) the mediator is significantly related to the dependent variable; and (4) the relationship between predictor and dependent variable appears weaker or becomes nonsignificant with the addition of the mediator. As presented in Table 2, FWA usage served as a significant predictor for work engagement ($b = .08, t = 3.85, p < .01$) and inclusion climate ($b = .12, t = 6.29, p < .01$) with age and gender controlled, supporting Conditions 1 and 2, respectively. The significant relationship between inclusion climate and work engagement ($b = .45, t = 13.77, p < .01$) supported Condition 3. When the predictor and the mediator were added simultaneously into the regression equation, the relationship of FWA usage with work engagement apparently weakened, for the regression coefficient decreased from $b = .08 (t = 3.85, p < .01)$ to b

=.03 ($t = 1.43, p = 0.15$). Thus, Condition 4 was satisfied. The results of PROCESS analysis (5000 bootstrap samples) (see Table 3) further confirmed that the indirect effect of proactive personality on career adaptability via thriving was significant ($b = .53, \text{boot se} = .01, 95\%CI = [.04; .07]$). These results indicated that inclusion climate mediated the relationship between FWA usage and work engagement. Therefore, Hypothesis 1a was supported.

Hypothesis 1b predicted the mediation effect of inclusion climate on the FWA-turnover intention relationship. Following Baron and Kenny's (1986) proposal, mediation analysis ends because relationship between FWA and turnover intention was not significant ($b = -0.04, t = -1.7, p = .09$). However, Kenny, Kashy, and Bolger (1998) argue that Step 1 is not required. With that said, we continued to conduct regression analyses to detect hypothesis 1b. From the regression analysis, the results are $b = .12 (t = 6.29, p < .01)$, and thus FWA usage is significantly related to inclusion climate. The results of the multiple regression analysis are $b = -.34 (t = -8.95, p < .01)$. Because both results were significant, we can say inclusion climate significantly mediates the relationship between FWA usage and turnover intention. The results of PROCESS analysis (5000 bootstrap samples) (see Table 3) further confirmed that the indirect effect of FWA usage on turnover intention via inclusion climate was significant ($b = -.04, \text{boot se} = .01, 95\%CI = [-.06; -.02]$). Therefore, Hypothesis 1b was supported.

Table 2: Results of regression analysis followed by Baron and Kenny's 4 step analysis

	Step 1		Step 2	Step 3	
	Work engagement	Turnover intention	Inclusion climate	Work engagement	Turnover intention
Gender	-.07	.04	-.04	-.05	.03
Age	-.01	-.01	.01	-.01	-.01
FWA usage	.08**	-.04	.12**	.03	.01
Inclusion climate				.45**	-.34**
R^2	.02**	.01	.04**	.17**	.08**
ΔR^2	.01	.01	.04	.17	.07

** $p < .01$, * $p < .05$

Table 3: Results of PROCESS analysis

FWA usage →		Inclusion climate →		Work engagement				
Mediator		Conditional Indirect Effect		SE	BootLLCI	BootULCI		
Inclusion climate		.05		.01	.03	.07		
Moderator		Level		Conditional Indirect Effect		SE	BootLLCI	BootULCI
Procedural Justice	High	.03		.01	.01	.06		
	Low	.06		.02	.03	.09		
Index of mediated moderation:								
Index		-.02		.02	-.05	.01		

FWA usage →		Inclusion climate →		Turnover intention				
Mediator		Conditional Indirect Effect		SE	BootLLCI	BootULCI		
Inclusion climate		-.04		.01	-.06	-.02		
Moderator		Level		Conditional Indirect Effect		SE	BootLLCI	BootULCI
Procedural Justice	High	-.02		.01	-.04	-.01		
	Low	-.05		.01	-.07	.02		
Index of mediated moderation:								
Index		.02		.01	-.01	.04		

Hypothesis 2a and 2b predicted that Perceived procedural justice moderates the positive and indirect effect of FWA on work engagement through inclusion climate. Hypotheses were tested by single model bootstrap method to assess the significance of indirect effects of mediator and moderator (Hayes, 2022). FWA usage was the independent variable and inclusion climate was the mediating variable. The outcome variables were work engagement and turnover intention. Perceived procedural justice was proposed as the moderator. The mediated moderation analysis tested the conditional indirect effect of the moderating variable (perceived procedural justice) on the relationship between the predictor variable (i.e., high perceived procedural justice vs. low perceived procedural justice) and the outcome variables (i.e., work engagement, turnover intention) via a latent mediator (inclusion climate). PROCESS for R macro, model 7, (Hayes, 2022) was used with bias-corrected 95% confidence intervals ($n = 1006$) to test the significance of the indirect (mediating) effect, or conditional indirect effect, adjusted by perceived procedural justice. This model explicitly tests the moderated effect on the path from predictor to mediator. An index of mediated moderation was used to test the significance of mediated moderation, i.e., the difference

in indirect effects between levels of perceived procedural justice (Hayes, 2022). Significant effects are supported by the absence of zeros in the confidence intervals.

Hypothesis 2a predicted that the mediating effect of inclusion climate on the relationship between FWA usage and work engagement would be stronger for individuals with lower perceived procedure justice rather than high. This moderated mediation hypothesis was tested with Hayes' PROCESS macro for Model 7 based on 5000 bootstrap samples. The analysis generated an index of moderated mediation (index = $-.02$, boot se = $.02$, 95%CI = [$-.05$; $.01$]), which indicated that the moderating effect was not significant (Hayes, 2022). Thus, hypothesis 5 was not supported.

Hypothesis 2b predicted that the mediating effect of inclusion climate on the relationship between FWA usage and turnover intention would be stronger for individuals with low rather than high. This moderated mediation hypothesis was tested with Hayes' PROCESS macro for Model 7 based on 5000 bootstrap samples. The analysis generated an index of moderated mediation (index = $.02$, boot se = $.01$, 95%CI = [$-.01$; $.04$]), indicating that the moderating effect was not significant (Hayes, 2022). Thus, hypothesis 6 was not supported.

4 Discussion

With the increasing diversity of work environments, there has been an increased focus on how the effects of FWA affect organizations. In this study, we have examined how FWA usage leads to work engagement and turnover intentions through the mediating effects of inclusion climate and the moderating effects of procedural justice.

The findings supported the proposed mediation hypotheses. However, no support for the mediated moderation hypotheses. In general, the study confirms FWA usage has a positive effect on work engagement and a negative effect on turnover intention (close to significant).

From the perspective of self-determination theory, FWA is believed to enhance work engagement by giving employees autonomy over decisions about when, where, and how they work.

Based on optimal distinctive theory and self-determination theory, we draw the mediating hypothesis of inclusion climate (Hypotheses 1a & 1b). The result showed FWA usage positively affects work engagement through the partial mediation of inclusion climate. FWA sends the message that the organization respects the uniqueness of its employees and actively embraces their own ways of working, which enhances the employees' sense of belonging to the group. Employees who develop a sense of belonging identify themselves with the organization, contribute to the organization and seek to increase their own value by increasing the value of the organization. In other words, they increase work engagement and decrease turnover intentions. On the other hand, perceptions of procedural justice showed no moderating effect of FWA on work engagement and turnover intention through the inclusion climate (Hypotheses 2a & 2b). In other words, procedural justice perceptions of fairness do not contribute to the outcomes. It can be inferred that employees did not view FWA as a mutually beneficial social exchange. It is possible that FWA was viewed as a taken-for-granted right for employees.

Another notable aspect of this study is the use of the R PROCESS as a method of analysis. Although the use of R as a method for mediation analysis is not yet widespread in Japan, we hope that this paper clarifies the steps of coordinated mediation analysis in R and can be used as study material.

4-1 Practical implication

From a practical standpoint, the study suggests that organizations consider offering work policies such as flextime and shorter workday programs to promote work engagement. The study also found that the inclusion climate is intervening in the

process of FWA improving engagement. In addition to implementing FWA, it is important for HR or managers to make employees perceive that they have the autonomy to choose their own work style. For example, regular one-on-one meetings to discuss their own work style and help them choose better measures for their work style. The concern is that employees may not be able to express themselves, so it is important to ensure psychological safety. Psychological safety refers to an environment in which employees can speak without hesitation and expose their true selves without anxiety. In the one-on-one meeting, managers could try to create an atmosphere in which the subordinate feels comfortable talking by offering support and empathy. In this way, organizations can retain employees when they have the autonomy to decide how they work and a sense that they are valued by the organization.

4-2 Limitation and areas for future research

Research findings should be considered within the constraints of the database. Results may vary in different contexts. Given that there are many types of FWAs, differences in the effects of various types of FWAs on organizational outcomes can be expected. The study focused on FWA usage as an independent variable and therefore lacks a investigation from FWA accessibility. By including the availability of FWAs as a variable, it is possible to examine the impact on organizational outcomes of the perception that a wide variety of FWAs are offered in the workplace, as well as from the perspective of those who experience FWAs. Naito & Hayashi (2022) argued that FWA should be examined from non-users' perspective, as well as users' perspective. They defined non-users as employees who could not always get benefits from FWA systems. By incorporating FWA users' and non-users perspectives, we can gain more comprehensive insight into the nature and impact of FWA on organizational outcomes.

The moderating effect of procedural justice on the association between FWA and inclusion, was not significant. The results imply other variables to moderate the mediational role of inclusion. Since this was a correlational study, it was not possible to prove causality among variables. In the future, we would like to prove causality among variables using experimental methods.

In addition, while this study focused only on the positive aspects of FWA, the negative aspects should also be analyzed in depth in the future. For instance, injustice perception and sub-groups might occur due to FWA.

4-3 Conclusion

This study developed and tested a mediated moderation model that explains the relationship between FWA and work engagement, as well as turnover intention. The mediation effect of inclusion climate was found to enhance the relationship of FWA usage and work engagement. The practical implications for HR managers are to foster climate of inclusion, thereby helping employees find meaning in their work and promoting a positive and supportive organizational environment.

5 Appendix: Questionnaire Items

Q. あなたの会社内で提供されている働き方についてお聞きします。

1. フレックスタイム制度
(始業・終業時刻や勤務時間を上司と相談して決めることで、生活と仕事のバランスを取りながら効率的に働くことができる仕組み)
2. 在宅勤務
(自宅からの勤務)
3. モバイルワーク制度
(移動中の車内、コワーキングスペース、ワークスペース、サテライトオフィスなど自社以外の場所での勤務)
4. 短時間勤務制度
(仕事と家庭を両立させるために労働時間を短縮する働き方。1日の所定労働時間を原則として6時間(5時間45分から6時間まで)とする制度。)
5. 育児休暇
(育児のための休暇制度)
6. 介護休暇
(従業員が要介護状態にある対象家族の介護や世話をするための休暇)
7. 社内託児所
(会社の敷地内や近隣に保育スペースや保育士を配置し、従業員の子どもを預かる制度)
8. 週休3日制度(週4日勤務制度)
(一週間のうち3日休日とする制度)
9. 所定外労働の制限(残業免除)
(育児や介護のために残業などの所定外労働を免除できる制度)
10. 時差出勤制度
(所定内労働8時間労働休憩1時間を基準に、「8時～17時」、「10時～19時」など出勤退勤時間をずらせる制度。フレックスタイム制度との違いは、8時間労働が決まっているかどうかである。)

回答：

- (1) 提供されていないが、必要ではない
- (2) 提供されていないが、あれば利用したい
- (3) 提供されているが、利用していない
- (4) 提供されていて、利用している
- (5) よくわからない

Q. 職場においては、給与、各種手当、評価、昇進、配置転換など、あなたを含めた個々の従業員に重大な影響を与える様々な意思決定が下されます。そのような意思決定の際の手続きやプロセスについてお聞きします。

1.	その手続きやプロセスにおいて、従業員は意見を述べることができる。
2.	その手続きの中で、従業員の意見は聞き入れられない。
3.	その手続きによって下された決定に対して、従業員は影響力を行使できる。
4.	その手続きで下される決定には、従業員の意見が反映されていない。
5.	その手続きやプロセスは一貫している。
6.	その手続きは、偏って行われている。
7.	その手続きは、偏っていない。
8.	意思決定を行うための手続きやプロセスは一面的で偏っている。
9.	その手続きやプロセスは、正確な情報に基づいて進められている。
10.	その手続きは、誤った情報に基づいている。
11.	その手続きで決定された事項に対して、異議を申し立てることができる。
12.	その手続きで下された決定は変更不能である。
13.	その手続きやプロセスは、基本的な倫理やモラルを順守したものである。
14.	その手続きは、原則に沿っていない、間違っただものである。

回答：

- 1) 当てはまらない
- 2) あまり当てはまらない
- 3) どちらとも言えない
- 4) やや当てはまる
- 5) 当てはまる
- 1) 当てはまる

Q. あなたの職場環境についてお答えください。

1.	職場グループの中で私は価値のある人間として扱われている。
2.	職場グループの中で私は帰属感を感じる。
3.	職場グループは自分のいるべき場所だと思う。
4.	職場グループの人々は私のことを大切に思ってくれていると感じる。
5.	私は他の職場グループメンバーがもっていない自分の側面を職場グループに持ち込むことができる。

6.	私の考えが他と違っても、職場の人は自分の意見を聞いてくれる。
7.	仕事の際、職場グループと異なる意見を安心して述べる事ができる。
8.	私は職場グループの他のメンバーと仕事に対して異なる意見を持っていたとしても、それを伝えることができる。

Q. あなたの仕事についてお答えください

1.	今後1年の間に、現在の組織外で仕事を探すつもりはある。
2.	この組織の仕事を辞めたいと考えることはよくある。
3.	仕事をしていると、活力がみなぎるように感じる。
4.	職場では、元気が出て精力的になるように感じる。
5.	仕事に熱心である。
6.	仕事は、私に活力を与えてくれる。
7.	朝目が覚めると、さあ仕事へ行こう、という気持ちになる。
8.	仕事に没頭しているとき、幸せだと感じる。
9.	自分の仕事に誇りを感じる。
10.	私は、仕事にのめり込んでいる。
11.	仕事をしていると、つい夢中になってしまう。

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