



# Person-organization fit in Japan: A longitudinal study of the effects of clan culture and interdependence on employee well-being

Y. Watanabe<sup>1</sup> · K. Takemura<sup>2</sup> · M. Nakayama<sup>3</sup> · M. S. Gobel<sup>4</sup> · H. Domae<sup>1</sup> · Y. Uchida<sup>3</sup>

Accepted: 27 October 2023 / Published online: 13 December 2023  
© The Author(s) 2023

## Abstract

Studies of person-organization fit (P-O fit) have shown that a fit between the values of the individual and the values of the organization leads to higher job satisfaction. Here, we extended past research by investigating P-O fit on employees' well-being. We tested what characteristics of the person and the organization contributed to an effective P-O fit in Japan. Specifically, we examined the role of employees' levels of interdependence and perceptions of their organizational contexts as clan culture or market culture. This allowed us to test what type of organizational culture formed an effective P-O fit for employees with highly interdependent cultural values in Japan. A longitudinal survey of 456 workers in Japan conducted in 2021 and 2022 revealed that clan culture—organizational culture emphasizing interpersonal harmony—was positively related to employees' well-being, and the effects were stronger for employees with high levels of interdependence. Conversely, market culture—organizational culture emphasizing competition and achievement—was unrelated to employees' well-being. In fact, it was negatively related to those employees' well-being who scored high on interdependence. Taken together, these results showed that the effects of organizational culture on employees' well-being depended on the levels of their interdependence. It seems that interdependence (P) and clan culture (O) provide an ideal P-O fit for Japanese companies.

**Keywords** Organizational culture · Well-being · Cultural self-construal · Interdependence · P-O fit

✉ Y. Watanabe  
yasushi.watanabe.77@gmail.com

K. Takemura  
kosuke-takemura@biwako.shiga-u.ac.jp

M. Nakayama  
nakayama.masataka.4v@kyoto-u.ac.jp

M. S. Gobel  
M.G.Gobel@sussex.ac.uk

H. Domae  
hiina936@gmail.com

Y. Uchida  
uchida.yukiko.6m@kyoto-u.ac.jp

<sup>1</sup> Graduate School of Human and Environmental Studies, Kyoto University, Yoshida-Nihonmatsucho, Sakyo-Ku, Kyoto-Shi, Kyoto 606-8501, Japan

<sup>2</sup> Faculty of Economics, Shiga University, 1-1-1 Banba, Hikone, Shiga 522-8522, Japan

<sup>3</sup> Institute for the Future of Human Society, Kyoto University, Yoshida-Shimoadachicho, Sakyo-Ku, Kyoto-Shi, Kyoto 606-8304, Japan

<sup>4</sup> School of Psychology, University of Sussex, Sussex House, Falmer Brighton BN1 9RH, UK

## Introduction

There is a growing interest in the well-being of employees among scholars and managers. Managers recognize that increasing their employees' well-being leads to sustainable organizational development and increases productivity and profitability (Patterson et al., 2004). One important way to enhance employee well-being is to focus on Person-Organization (P-O) fit because a better P-O fit leads to more favorable job attitudes, including greater job satisfaction, increased organizational commitment, and lower job turnover intention (Kristof-Brown et al., 2005; Van Vianen, 2018). For example, Attention-Selection-Attribution theory explains that individuals are attracted to, satisfied with, and retained in companies with organizational cultures that they find favorable (Schneider et al., 1995). In turn, the more satisfied the employees are, the more favorable their job attitudes will be (Straatmann et al., 2020). Thus, a good fit between a person and an organization yields a manifold of positive outcomes (Meyer et al., 2010; Van Vianen, 2018). In contrast, a poor fit between a person and an organization reduces individual well-being (Shaw & Gupta, 2004). While the overall positive

effects of P-O fit have been widely documented in the literature, it remains unknown what elements of the individual (P) and the organization (O) form an effective P-O fit in East Asia. The current study takes a cultural psychology perspective and examines what type of organizational culture (O) forms an effective P-O fit and can improve the well-being of employees differing in their levels of interdependence (P).

Although there is some initial research investigating P-O fit in non-Western countries (Chuang et al., 2015; Nyambergera et al., 2001; Treviño et al., 2020), their regional coverage is still very limited (Chuang et al., 2015). In particular, the number of studies from Japan is minimal, accounting for only 1.4% of the total (Santos & De Domenico, 2015). East Asia is often categorized as a region with a culture of interdependence and collectivism (Hofstede, 1980; Markus & Kitayama, 1991). But there exist important cultural variations within Asia. For example, research found that the effects of Person-supervisor fit differed significantly between Japan and Korea (Jung & Takeuchi, 2014). As the economic importance of the Asian region expands, it is crucial to have an in-depth understanding of Asia's diversity. In the present study, we focus on the role of P-O fit for employees' well-being in Japan.

### Interdependence in the workplace

One pillar of the P-O Fit is the employee (i.e., the person within the person-organization fit). Employees do not live in a social vacuum, but rather they are members of and shaped by cultural contexts. Cultural psychologists have demonstrated that how people think, feel, and behave significantly changes across cultures (Markus & Kitayama, 1991). For example, there are documented cultural differences in self-construal, i.e., in the way people define themselves. Individuals with independent self-construal are self-reliant and motivated by their own abilities to achieve their own goals. In contrast, individuals with interdependent self-construal feel that the boundary between self and others is ambiguous and that they do not exist independently of others. Thus, the latter are motivated by their relationships with others (Markus & Kitayama, 1991).

Importantly, these cultural differences in self-construal are also manifest among higher and lower ranked individuals in the workplace, and they shape their psychological and behavioral tendencies (Gobel & Miyamoto, 2023). For example, cultural differences influence employees' career development and job mobility. Highly independent individuals acquire a sense of self-efficacy by delivering tangible results based on their internal abilities, knowledge, and skills, confirming their competence (Heine et al., 2001; Norasakkunkit & Uchida, 2011). In this process, they are oriented to develop their careers as specialists (Norasakkunkit & Uchida, 2011). In addition, due to their desire to better utilize their internal

abilities, knowledge, and skills, individuals exhibit higher job mobility, often changing workplaces to enhance them further. In fact, according to a 25-country survey on intention to change jobs, four of the top five countries—Canada, the United States, the United Kingdom, and France—are considered to have highly independent employees (Sousa-Poza & Henneberger, 2004). In stark contrast, highly interdependent individuals are more likely to fulfill the required roles in their organizations by striving to overcome deficiencies in their knowledge and skills. These employees are oriented toward developing their careers as generalists within their organizations (Norasakkunkit & Uchida, 2011), thereby lowering their job mobility. In fact, the above-mentioned study found that only 1.8% of Japanese employees, the lowest percentage of all countries, voiced their intention to change jobs<sup>1</sup> (Sousa-Poza & Henneberger, 2004).

National contexts also play a crucial role in shaping employees' well-being. This is because what constitutes happiness differs from culture to culture (Uchida et al., 2004). For example, emotions related to happiness are known to differ among cultures. In independent cultures such as Europe and the U.S., positive and negative emotions are seen as contrasting elements, with a pronounced inclination towards positive emotion. In contrast, in interdependent cultures such as those in East Asia, they are perceived as complementary, leading individuals to often experience them in a blended state (Uchida & Oishi, 2016). Consequently, in independent cultures, such as the U.S., maximizing positive emotional experiences is believed to lead to happiness. Yet, in interdependent cultures such as East Asia, positive emotions are not necessarily equated with happiness (Uchida & Oishi, 2016). Because individuals in East Asia strive to meet the expectations of others, they also focus on their own shortcomings (Heine et al., 2001). Thus, feeling negative emotions is not necessarily considered something to be avoided in East

<sup>1</sup> Of course, there are factors other than culture that can play a role in job turnover intentions. For example, the lower intent to leave a job in Japan can also be the result of established personnel systems, such as mass recruitment of new graduates, lifetime employment, and a seniority-based wage system. These systems have taken root in Japanese companies over the past 40 years, including among blue-collar workers. They have shaped internal labor markets within each company, subsequently reducing the incentives for workers to seek opportunities elsewhere (Nakabayashi & Morimoto, 2019). Nonetheless, understanding the impact of culture remains crucial because culture exerts a strong influence on individuals' thoughts and actions (Markus & Kitayama, 1991). For example, independent compared to interdependent individuals can differ in their preferences for what organizations they would like to join. Highly independent individuals are more likely to prefer joining organizations that value equity, individual autonomy, and self-reliance (Suhmann et al., 2018), whereas highly interdependent individuals are more likely to prefer joining organizations that value interpersonal relationships such as camaraderie (Rego & Cunha, 2009).

Asian cultures, including in Japan. Similarly, cultural differences also emerge in terms of experiencing well-being in the workplace. While individuals in the U.S. often think that “being well” in the workplace means they can demonstrate their abilities, develop their careers, and feel many positive emotions, individuals in East Asia often think that “being well” in a workplace means they can have solid positions and roles in a group that they consider important (Heine, 2005).

### Organizational contexts of clan versus market culture

The other pillar of the P-O Fit is the organizational culture (i.e., the organization in person-organization fit). According to the competing values framework, there are four organizational culture types that differ along two dimensions: internal versus external focus and flexibility versus control (Cameron & Quinn, 2009; Quinn & Rohrbaugh, 1983).

*Clan culture* is an organizational culture formed by the combination of an internal focus and flexibility. Its defining feature is the focus on human resource development, leveraging cohesion and morale in the organization (Quinn & Rohrbaugh, 1983). In an organizational context of clan culture, commitment, communication, and human resource development are all core values seen at the heart of organizational culture (Hartnell et al., 2019), fostering interpersonal relationships among employees by promoting organizational participation, cooperation, and collaboration (Cameron & Quinn, 2009). *Adhocracy culture* is an organizational culture formed by the combination of an external focus and flexibility. It is defined by its pursuit of growth and resource acquisition, with flexibility and readiness being pivotal characteristics (Quinn & Rohrbaugh, 1983). The core values of this organizational culture include innovation, adaptability, and agility (Cameron & Quinn, 2009), showcasing novel solutions, vision, responsiveness, and adaptability to external environments (Hartnell et al., 2019). *Hierarchy culture* is shaped by the combination of an internal focus and control. Its distinctive ends are the emphasis on achieving stability and control, facilitated by effective information management and communication (Quinn & Rohrbaugh, 1983). The core values of this organizational culture include efficiency, timeliness, consistency, and uniformity (Cameron & Quinn, 2009), ensuring efficient and consistent operations through formal role/rule setting, and defining procedures. *Market culture* is formed by the combination of an external focus and control. It is distinctively oriented towards productivity and efficiency, relying on strategic planning and goal-setting as essential instruments (Quinn & Rohrbaugh, 1983). The core values of this organizational culture are centered on goal achievement, profit orientation, and result orientation (Cameron & Quinn, 2009), emphasizing setting and achieving goals,

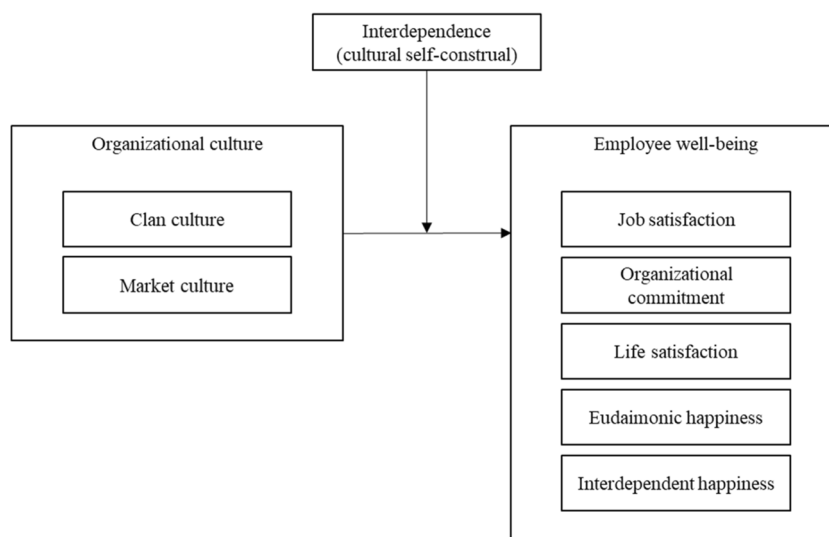
engaging in aggressive competition, and maintaining a customer-oriented approach (Hartnell et al., 2019).

In this research, we focused on the effects of clan and market culture. This is because contrasting the effects of clan and market culture is important for the understanding of the mechanisms underlying the P-O Fit since clan and market cultures are composed of opposite values. First, a recent meta-analysis that explored the congruence between national culture and organizational culture and its effect on job performance found that clan culture had a stronger positive relationship with job performance within collectivist societies, whereas market culture had a stronger positive relationship with job performance in individualist societies (Beus et al., 2021). Second, the competing values framework offers a useful perspective to understand the impact of organizational cultures on employees’ well-being (Beus et al., 2020; Hartnell et al., 2019) because organizational cultures can play a significant role in improving well-being in the workplace (Carr et al., 2003). For example, a recent meta-analysis found that organizational contexts of clan culture yielded a positive effect on employees’ job satisfaction even after controlling for the effects of leadership and effective human resource practices (Hartnell et al., 2019). Similarly, we expected that clan but not market culture would also yield beneficial effects on employees’ well-being in Japan (H1). Moreover, we expected that in Japan, individuals with higher levels of interdependence (P) would especially benefit from this organizational culture that emphasizes interpersonal relationships (O) because it would likely form a strong P-O fit for them and thus improve their well-being (H2).

### Broadening the measure of employee well-being

Initially, research focusing on employee well-being assessed well-being as job satisfaction (Wright & Cropanzano, 2004). More recently, however, comprehensive conceptualizations and measures of well-being in the workplace have been proposed (Fisher, 2010; Zheng et al., 2015). For example, Fisher (2010) proposed including work engagement and organizational commitment as measures of happiness at work (HAW). Page and Vella-Brodrick (2009) suggested that employee well-being should be understood in an integrated manner and include three core components: (1) subjective well-being, (2) workplace well-being, and (3) psychological well-being. Zheng et al. (2015) included three dimensions of employee well-being: (1) life well-being, (2) workplace well-being, and (3) psychological well-being.

Selecting meaningful indicators to measure different concepts of well-being is particularly important when considering the influence of culture. Hitokoto and Uchida (2015) pointed out that conventional measures of well-being are limited in that they implicitly assume mainly independent self-construal or individualistic values. Instead, these



**Fig. 1** Research model

authors proposed a novel measurement to quantify interdependent happiness. Interdependent happiness focuses on (1) cooperation with others, (2) a sense of humanity, and (3) a peaceful emotional state. Given that interdependence is the predominant self-construal of individuals in East Asia, including in Japan, the current study measured interdependent happiness in addition to satisfaction with life (Diener et al., 1985) and eudaimonic happiness (Ryff & Keyes, 1995). We also measured job satisfaction (McLaney & Hurrell, 1988) and organizational commitment (Meyer & Allen, 1991), which have been examined in many previous studies (Hartnell et al., 2019).

## Hypothesis

We tested two hypotheses in this research:

Past research informed by the competing values framework found that clan culture, which places substantial value on enhancing the relationship and sense of belonging among organizational members, is most strongly related to job satisfaction (Hartnell et al., 2019). Therefore, we hypothesized that clan culture would also have a positive effect on employee well-being. On the other hand, market culture is an organizational culture that values productivity, outcomes, and competition, with little attention paid to the interpersonal relationships within the organization. Therefore, we expected that market culture would not yield any positive effects on employee well-being.

**H1** | Clan culture is positively related to employee well-being (i.e., job satisfaction, organizational commitment, life satisfaction, eudaimonic happiness, and interdependent happiness), while market culture is unrelated to it.

Past research found that P-O fit positively affected some aspects of employee well-being, such as job satisfaction and organizational commitment (Kristof-Brown et al., 2005; Van Vianen, 2018). If personal values are interdependent (P), maintaining a favorable interpersonal relationship within the organization might be a critical factor for forming an appropriate P-O fit. Clan culture values a sense of camaraderie within organizations. Thus, we expected that clan culture and interdependence would make for a strong P-O fit because they both value interpersonal relationships. As a consequence, we expected that clan culture would be particularly beneficial to the well-being of those employees with higher levels of interdependence.

**H2** | Interdependence moderates the effect that clan culture has on employees' well-being. Specifically, when interdependence is high, the effect of clan culture on well-being should be the strongest.

The research model is shown in Fig. 1

## Current study

We tested the effects of organizational cultures on Japanese employees' well-being and whether interdependence would moderate these effects. To this aim, we collected longitudinal questionnaire data from the same employees at nearly one-year intervals in February 2021 (Time 1) and March 2022 (Time 2). Given that our data was based on a survey, it can be difficult to establish any causal relationship. For example, we wanted to test whether clan culture affected employees' well-being. But it is easy to imagine the reversed causal relationship: if employees' well-being was high, then they might perceive their organizational context to be a clan

culture. To reduce the possibility of reverse causality, we first controlled for employees' well-being at Time 1, and we then analyzed the extent to which employees' well-being at Time 2 was explained by the perception of organizational cultures and interdependence. In other words, as the well-being of employees one year earlier was controlled for, we were able to analyze how much any changes in employees' well-being were predicted by their perception of organizational cultures and self-reported interdependence. Thus, one of the strengths of this study is the use of longitudinal data.

It is important to note that there is an ongoing scholarly debate about how to best measure P-O fit. Currently, three different measurement approaches are proposed, representing different paradigms of P-O fit (Kristof-Brown & Billsberry, 2013; Kristof-Brown & Jansen, 2007). First, there is the direct measurement approach. In this approach, participants directly report their perception of P-O fit. P-O fit measured in a direct way shows the highest correlation with outcomes (Santos & De Domenico, 2015). However, this approach does not elucidate any of the mechanisms underlying individuals and organizations within the P-O fit. Second, there is the indirect measurement approach. In the indirect measurement approach, the degree of P-O fit is examined collecting data separately from organizations and individuals. Finally, it is possible to examine P-O fit by checking subjective perceptions about oneself and the organization to which the employee belongs. In this approach, it is common to use the same constructs to measure perceptions of individual and organizational values (e.g., O'Reilly et al., 1991). But this allows for only a limited set of characteristics to be examined. In contrast, it was our aim to bring together theorizing from cultural psychology with that from the competing values framework. Thus, in this study, we measured employees' self-construal (i.e., degree of interdependence) as the P element and their perceptions of organizational cultures (i.e., clan versus market culture) as the O elements, and we then examined the extent to which different P-O fit predicted employees' well-being. We applied this approach because we consider a better understanding of the P-O fit mechanisms can be gained by integrating cultural psychological research on individuals' self-construal with the literature on organizational cultures.

## Method

### Sample

Participants were recruited by a research company. Responses were collected stratified by age (i.e., 30 s, 40 s, and 50 s), gender (i.e., male, female), and job classes (i.e., section head or higher, supervisor and unit head, and staff not in management positions). The number of respondents at Time 1 was 936, and the number

of respondents who continued to respond at Time 2 was 633. In order to improve the quality of the data, two items were included as attention checks, and only data from the respondents who passed the attention checks were included in the final analysis. The number of respondents who passed the attention check items was 487. In order to analyze longitudinal data within the same organizations, respondents who had moved organizations were excluded. Thus, our final sample consisted of 456 respondents with almost equal gender representation: 237 males and 219 females. Respondents' average age was 47.3 years, and their average length of tenure in their current company/organization was 17.2 years. The industries in which respondents were employed varied, with 106 (23.2%) working in the manufacturing industry, 69 (15.1%) in the medical/welfare industry, 57 (12.5%) in the service industry, 56 (12.3%) in the wholesale/retail industry, 32 (7.0%) in the construction industry, 31 (6.9%) in the financial/insurance industry, 27 (5.9%) in the transportation industry.

## Measures

We measured five dependent variables related to employees' well-being at both Time 1 and Time 2: Job satisfaction, organizational commitment, life satisfaction, eudaimonic happiness, and interdependent happiness. We also assessed two types of organizational culture — clan culture and market culture — and employees' cultural self-construal — interdependence. Finally, we assessed employees' gender, age, company size, and job position. All of these were measured at Time 2.

*Job satisfaction* was measured with a 1-item Likert scale both at Time 1 and Time 2, asking participants, "All in all, how satisfied would you say you are with your job?" (McLaney & Hurrell, 1988). Responses were made from (1) "Very dissatisfied" to (7) "Very satisfied."

*Organizational Commitment* was measured using a 2-item Likert scale both at Time 1 and Time 2. The items were: (1) "I feel emotionally attached to my organization"; and (2) "I was taught to believe in the value of remaining loyal to one organization." (Meyer & Allen, 1991). Responses were made from (1) "Strongly disagree" to (5) "Strongly agree." The Cronbach Alpha was .64 at Time 1 and .67 at Time 2.

*Life satisfaction* was measured using a 1-item Likert scale at both Time 1 and Time 2. Participants responded to the statement "I am satisfied with my life" (Diener et al., 1985) on a scale from (1) "Strongly disagree" to (5) "Strongly agree."

*Eudaimonic happiness* was measured with a 1-item measure taken from the sense of meaning in life scale (Ryff & Keyes, 1995) at both Time 1 and Time 2. Participants responded to the question, "How often did you feel that your life has a sense of direction or meaning to it?" The frequency options were: (1) "Never"; (2) "Once or twice"; (3) "About once a week"; (4) "About 2 or 3 times a week"; (5) "Almost every day"; and (6) "Every day."



*Interdependent happiness* was assessed using the scale developed by Hitokoto and Uchida (2015). At Time 1, this concept was measured with a shortened 2-items version: (1) “I believe that I and those around me are happy”; and (2) “I make significant others happy.” Then, at Time 2, the full 9-items Likert scale was used, modifying items so that they specifically related to the workplace: (1) “I believe that I and those around me are happy in my workplace.” Respondents indicated their agreement on a scale from (1) “Strongly disagree” to (5) “Strongly agree.” The Cronbach Alpha was .75 at Time 1 and .90 at Time 2. It is notable that while the Time 1 measure was one of general sense of interdependent happiness, the Time 2 measure was tailored more towards workplace-specific responses, echoing our emphasis on employee well-being. Both measures were correlated at  $r = .50$ . Even though this isn’t notably high, it suggests they tapped into a common concept. Given our analysis predominantly used the items from Time 2 and items from Time 1 as controls, we don’t see this as a critical concern.

*Clan culture* and *Market culture* were measured with the Competing Values Culture Assessment scale (Cameron & Quinn, 2009) at Time 2. There are six items for each type of organizational culture. Example items for clan culture include: “My organization is a very personal place. It is like an extended family. People seem to share a lot of themselves”; “The leadership in the organization is generally considered to exemplify mentoring, facilitating, or nurturing”; “The organization emphasizes human development. High trust, openness, and participation persist”. The Cronbach Alpha was .94 for clan culture. Example items for market culture include: “My organization is very production orientated. A major concern is with getting the job done, without much personal involvement”; “The leadership in the organization is generally considered to exemplify an aggressive, results-oriented, no-nonsense focus”; “The organization emphasizes competitive actions and achievement. Hitting stretch targets and winning in the marketplace are dominant”. The Cronbach Alpha was .91 for market culture. Data was collected on a 9-point Likert scale anchored at (1) “Not at all agree” and (9) “Strongly agree.”

*Interdependence* was measured with a 10-items 5-Likert self-construal scale (Park & Kitayama, 2014) at Time 2. Respondents read the statements and answered on a scale ranging from (1) “Strongly disagree” to (5) “Strongly agree.” Example items include: “I think it is important to keep good relations among one’s acquaintances in my workplace”; “I avoid having conflicts with members of my group in my workplace”; and “I respect people who are modest about themselves in my workplace.” The Cronbach Alpha was .79.

*Control variables.* We asked employees to report their sex, age, size of the company they work for, and position in their company. Respondents were asked the size of the company they belong to on a 5-point scale: (1) “Less than 10”; (2) “10 to 99”; (3) “100 to 499”; (4) “500 to 999”; (5) “1000

or more.” Respondents were also asked about their position within the company on a 9-point scale: (1) “Department Manager or higher”; (2) “Assistant Manager”; (3) “Section Head”; (4) “Deputy Section Head”; (5) “Assistant Section Head”; (6) “Group Leader”; (7) “Unit Head”; (8) “Supervisor”; (9) “Not in a management position.”

In order to mitigate potential common method biases in our study, the different scale endpoints were applied.

## Analytical strategy

We conducted a series of preliminary analyses to test whether our data complied with statistical assumptions (e.g., normal distribution). Then, we carried out hierarchical multiple regression analysis to clarify the effects of each factor and its effect size. In Step 1, we entered all control variables into our model. In Step 2, we examined the effects of two organizational cultures and interdependence on employees’ well-being. In Step 3, we tested the interaction effects between organizational culture and interdependence on employees’ well-being. Simple slope analyses at standard deviations of  $\pm 1$  were then conducted to delve deeper into the significant moderation effects. All analyses were conducted using the `lm()` function in R.

## Results

### Preliminary analyses

A series of preliminary analyses were conducted to ensure the suitability of the data for subsequent analyses.<sup>2</sup> First, we conducted Little’s MCAR (Missing Completely At Random) test to assess the randomness of missing values. The test showed the missing data was random ( $\chi^2(1237) = 1154.53$ ,  $p = .95$ ). Next, we carried out Harman’s single-factor test to assess the potential for CMV (Common Method Variance). The result showed that the first factor accounted for 27.40% of the total variance, which suggests that CMV was not present in our data. Finally, to test the distribution of each variable and its influence on our analyses, we examined each variable using Q-Q plots. They showed that variables were mostly normally distributed around the center, with potential biases and outliers evident at both ends of the Q-Q plots. One notable exception was eudaimonic happiness, which showed deviations from a normal distribution both at the center and the ends of the Q-Q plot. To test whether the distribution of our variables could present challenges to the use of multiple

<sup>2</sup> The figure and tables of the preliminary analyses results are presented as supplemental material.

regression analyses, we conducted the Kolmogorov–Smirnov Test to check the normality of residuals at each step of the hierarchical multiple regression analysis. This test revealed that the residuals generally followed a normal distribution for most variables across the different steps, with a few exceptions: The residuals of the aforementioned eudaimonic happiness at all three steps didn't exhibit a normal distribution. Consequently, we report the results concerning eudaimonic happiness with caution and derive the primary conclusions from analyses involving other employees' well-being measures. Furthermore, the residuals for life satisfaction and interdependent happiness did not follow a normal distribution in Step 1. Nonetheless, the impacts on life satisfaction and interdependent happiness are believed to be minimal, as the central discussions predominantly revolve around Step 2 and Step 3.

Furthermore, we checked convergent-discriminant validity. To verify convergent validity, we conducted a confirmatory factor analysis and examined factor loadings and the Average Variance Extracted (AVE). Results showed that factor loadings were generally above .60 and AVE exceeded .50—with an exception in interdependence, where eight out of ten items showed factor loadings below .60, while the AVE was .28. Nonetheless, as reported in the Measures section, the Cronbach's  $\alpha$  was .78, indicating adequate internal consistency. We speculate that this deviance arose from the fact that interdependence is a multifaceted concept. Indeed, when conducting an exploratory factor analysis for the 10 items in our dataset, four factors emerged, cumulatively accounting for over 50% of the variance. These factors can be interpreted as one factor of interdependence with 1. prioritize group interests (e.g., "I often have the feeling that my relationships with others in my workplace are more important than my own accomplishment"), 2. tendency to avoid conflict (e.g., "I avoid having conflicts with members of my group in my workplace"), 3. interpersonal harmony (e.g., "I think it is important to keep good relations among one's acquaintances in my workplace"), 4. sensitivity to status (e.g., "In my personal relationships in my workplace, I am concerned about the other person's status compared to me and the nature of our relationship"). Given that interdependence has been theoretically discussed from multiple perspectives (Markus & Kitayama, 1991), we opted to advance with the subsequent analyses utilizing the original 10-item full scale. Simultaneously, we conducted supplemental analyses with the aforementioned sub-components of interdependence to check the robustness of our analyses with the full scale of interdependence.

Next, to verify discriminant validity, we compared the square root of the AVE with the correlation coefficients. The results showed that the square root of the AVE of each construct was larger than the correlation coefficients with other constructs in almost all cases, confirming the discriminant validity of our measures. Some caution is required when interpreting the discriminant validity between clan culture and organizational

commitment. While the square root of the AVE for clan culture (.85) is larger than its correlation with market culture ( $r = .74$ ), demonstrating discriminant validity, the square root of the AVE for market culture (.71) falls short of confirming discriminant validity. Thus, it would be prudent to perceive these two constructs as discriminant but closely related.

## Main analyses

Table 1 shows each measure's means, standard deviations, and inter-variable correlation coefficients at Time 2. Both clan culture and market culture positively correlated with all dependent variables: job satisfaction, organizational commitment, life satisfaction, eudaimonic happiness, and interdependent happiness. The inter-variable correlations with clan culture were slightly larger than those with market culture. Interdependence was mostly unrelated to key dependent variables except for organizational commitment ( $r = .37$ ). Clan culture and market culture showed a strong positive correlation ( $r = .58$ ). This result suggests that clan culture and market culture coexist in actual organizations, although they are defined as opposites within the dimensions of the competing values framework.

Table 2 shows the results of the hierarchical multiple regression analysis. In Step 1, sex/age/company size were used as control variables, and the employees' well-being measured at Time 1 was also entered as a control variable. In Step 2, clan culture, market culture, and interdependence were entered, and their effects on employees' well-being were tested. The results showed that the change in  $R^2$  in Step 2 was significant for all well-being variables: job satisfaction ( $\Delta R^2 = .03$ ,  $F(3, 373) = 6.96$ ,  $p < .001$ ), organizational commitment ( $\Delta R^2 = .14$ ,  $F(3, 365) = 30.79$ ,  $p < .001$ ), life satisfaction ( $\Delta R^2 = .02$ ,  $F(3, 368) = 4.76$ ,  $p < .01$ ), eudaimonic happiness ( $\Delta R^2 = .03$ ,  $F(3, 339) = 4.80$ ,  $p < .01$ ), and interdependent happiness ( $\Delta R^2 = .16$ ,  $F(3, 366) = 35.17$ ,  $p < .001$ ). The change in  $R^2$  was relatively large for organizational commitment ( $\Delta R^2 = .14$ ) and interdependent happiness ( $\Delta R^2 = .16$ ). As can be seen in Table 2, clan culture showed positive effects on all well-being measures, while market culture showed no clear effects except for interdependent happiness. For interdependent happiness, clan culture ( $\beta = .53$ ,  $p < .001$ ) had a positive effect, while market culture ( $\beta = -.15$ ,  $p < .01$ ) had a negative effect. Thus, H1 was supported. In Step 3, the interaction of organizational cultures and interdependence were entered into the models after each variable was centered. The change in  $R^2$  was significant for organizational commitment ( $\Delta R^2 = .01$ ,  $F(2, 365) = 3.84$ ,  $p < .05$ ) and interdependent happiness ( $\Delta R^2 = .01$ ,  $F(2, 362) = 3.03$ ,  $p < .05$ ), and it was marginally significant for life satisfaction ( $\Delta R^2 = .01$ ,  $F(2, 366) = 2.91$ ,  $p < .10$ ). Although the changes in  $R^2$  were small in all cases, these results indicate that the effects of organizational culture were moderated by the degree of interdependence. The interaction between interdependence and clan culture was significant for organizational commitment ( $\beta = .10$ ,

**Table 1** Descriptive statistics and correlations for study variables (Time 2)

	Mean	SD	1	2	3	4	5	6	7	8
1 Clan culture	4.65	1.64	-							
2 Market culture	4.83	1.46	.58***	-						
			[.51-.64]	-						
3 Interdependence	3.33	.53	.34***	.27***	-					
			[.26-.42]	[.18-.35]	-					
4 Job satisfaction	3.90	1.60	.41***	.21***	.08	-				
			[.33-.49]	[.12-.29]	[-.02-.17]	-				
5 Organizational commitment	2.97	.92	.58***	.38***	.37***	.43***	-			
			[.52-.64]	[.30-.46]	[.29-.45]	[.35-.50]	-			
6 Life satisfaction	3.10	1.08	.34***	.16**	-.03	.51***	.34***	-		
			[.26-.42]	[.07-.25]	[-.12-.07]	[.44-.58]	[.26-.42]	-		
7 Eudaimonic happiness	2.47	1.52	.31***	.17**	.07	.21**	.29***	.29***	-	
			[.22-.39]	[.07-.26]	[-.03-.16]	[.11-.30]	[.20-.38]	[.19-.37]	-	
8 Interdependent happiness	3.16	.71	.56***	.23***	.10	.62***	.46***	.63***	.32***	-
			[.49-.62]	[.14-.32]	[.01-.20]	[.56-.67]	[.38-.68]	[.57-.68]	[.24-.41]	-

95% confidence intervals are reported in brackets

\*\*  $p < .01$ . \*\*\*  $p < .001$

$p < .05$ ) and life satisfaction ( $\beta = .08$ ,  $p < .05$ ), and it was marginally significant for eudaimonic happiness ( $\beta = .09$ ,  $p < .10$ ) and interdependent happiness ( $\beta = .08$ ,  $p < .10$ ). As for market culture, the interaction with interdependence was significant for interdependent happiness ( $\beta = -.10$ ,  $p < .05$ ) and it was marginally significant for eudaimonic happiness ( $\beta = -.08$ ,  $p < .10$ ).<sup>3</sup>

We conducted simple slope analyses to examine these moderation effects of interdependence in detail. In particular, we analyzed the coefficient of organizational cultures when the score of interdependence was mean  $\pm$  1 SD.

<sup>3</sup> In the preliminary analyses, we identified the caution regarding the convergent validity of the ‘interdependence’ construct. Consequently, we conducted additional analyses to see if using the sub-components of interdependence, identified in the exploratory factor analysis, would alter the results obtained with the full-scale measurement. As a result, we found that the sub-component of ‘interpersonal harmony’ demonstrated significant interactions for clan culture’s effects on organizational commitment ( $\beta = .10$ ,  $p < .05$ ) and life satisfaction ( $\beta = .11$ ,  $p < .01$ ). A significant interaction between ‘interpersonal harmony’ and clan culture was also observed regarding market culture’s effect on interdependent happiness ( $\beta = -.13$ ,  $p < .01$ ). Importantly, these results are consistent with the outcomes from the full-scale interdependence presented in this result section. The sub-component of ‘prioritize group interest’ also showed significant interaction effect on the effects of clan culture regarding organizational commitment ( $\beta = .13$ ,  $p < .05$ ) and life satisfaction ( $\beta = .19$ ,  $p < .001$ ), aligning with the outcomes from the full-scale interdependence. It is also worth noting that the moderating effects varied across sub-components. For instance, the ‘tendency to avoid conflict’ showed little to no effect except the one on the relationship between market culture and eudaimonic happiness ( $\beta = -.13$ ,  $p < .05$ ).

Figure 2 shows the results for clan culture, and Fig. 3 shows the results for market culture.

As can be seen in Fig. 2, the effects of clan culture on employees’ well-being were stronger when interdependence was high (the unbroken lines). In particular, in the case of life satisfaction (upper right), the effect of clan culture was significant for high levels of interdependence ( $\beta = .18$ ,  $p < .001$ ) but not for low levels of interdependence ( $\beta = .06$ ,  $p > .10$ ). A similar result was observed for eudaimonic happiness (lower left), where the effect of clan culture was significant for high levels of interdependence ( $\beta = .19$ ,  $p < .01$ ) but not for low levels of interdependence ( $\beta = .03$ ,  $p > .10$ ).

Figure 3 shows the results for market culture, and it can be seen that the effects of market culture on eudaimonic and interdependent happiness were negative when interdependence was high. For interdependent happiness (right), the effect of market culture was negative and significant for high levels of interdependence ( $\beta = -.12$ ,  $p < .001$ ), whereas it was not significant for low levels of interdependence ( $\beta = -.02$ ,  $p > .10$ ). A similar trend was observed for eudaimonic happiness (left). A marginal negative effect was observed for high levels of interdependence ( $\beta = -.12$ ,  $p < .10$ ), whereas it was not significant for low levels of interdependence ( $\beta = .04$ ,  $p > .10$ ).

## Discussion

This study revealed that better P-O Fit resulted in greater well-being among Japanese employees, such that employees with more interdependent self-construals (P) in

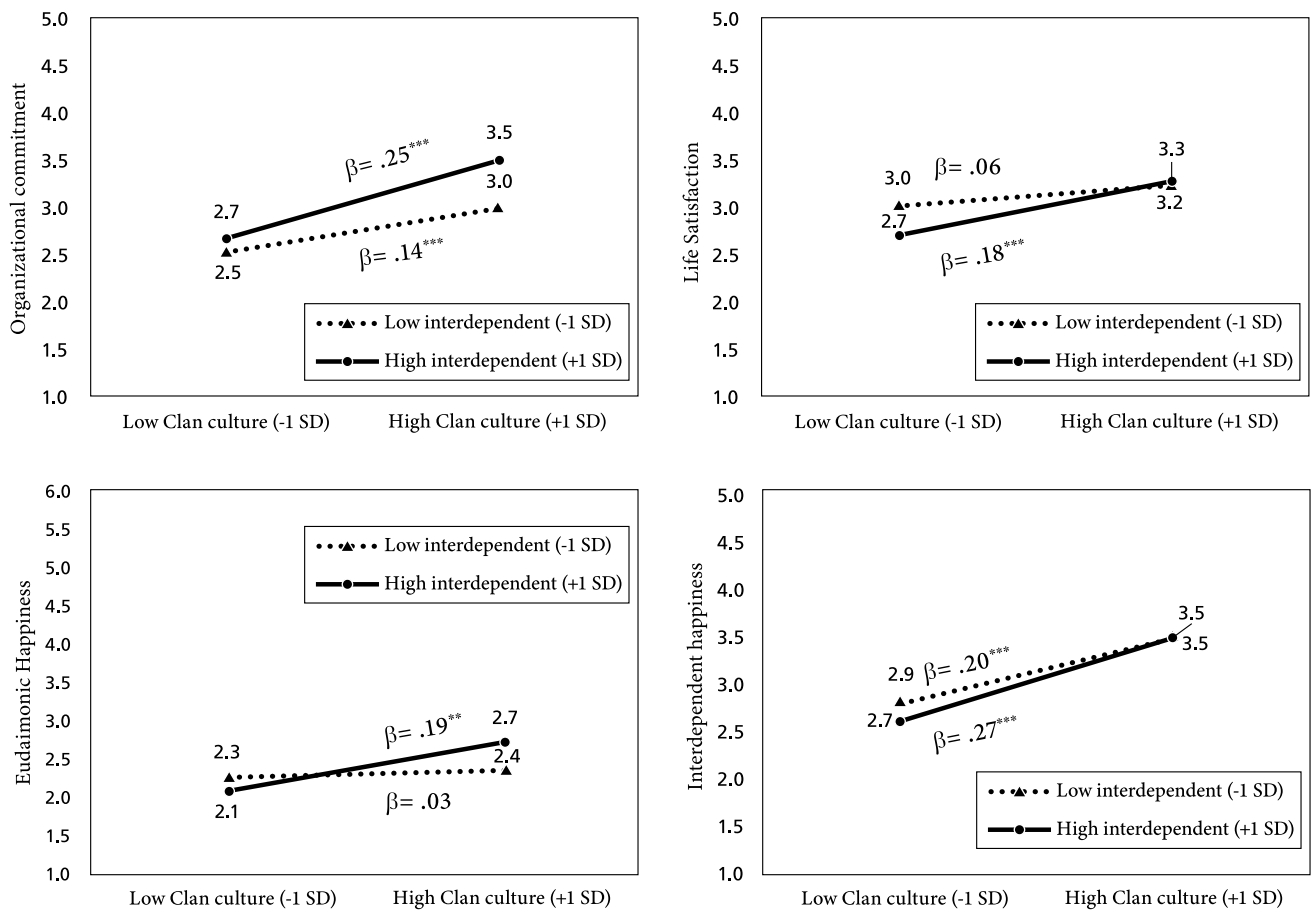


**Table 2** Hierarchical regression results for employee well-being

Variable	Job satisfaction (Time2)					Organizational commitment (Time2)					Life satisfaction (Time2)					Eudaimonic happiness (Time2)					Interdependent happiness (Time2)									
	B	95% CI for B	SE B	$\beta$	R2	$\Delta R2$	B	95% CI for B	SE B	$\beta$	R2	$\Delta R2$	B	95% CI for B	SE B	$\beta$	R2	$\Delta R2$	B	95% CI for B	SE B	$\beta$	R2	$\Delta R2$	B	95% CI for B	SE B	$\beta$	R2	$\Delta R2$
	LL	UL	LL	UL			LL	UL	LL	UL			LL	UL	LL	UL			LL	UL	LL	UL			LL	UL	LL	UL		
<b>Step1</b>																														
Constant	3.89***	3.77	4.00	0.06	.49	.49***	2.95***	2.85	3.01	0.04	.32	.32***	3.08	3.00	3.15	0.04	.56	.56***	2.36***	2.23	2.49	0.07	.31	.31***	3.13	3.07	3.20	0.03	.26	.26***
Employee well-being (Time1)	0.70***	0.62	0.77	0.04	.68***	.68***	0.53***	0.47	0.63	0.04	.56***	.56***	0.73	0.67	0.80	0.03	.73	.73***	0.57***	0.47	0.66	0.05	.53***	.53***	0.44	0.36	0.52	0.04	.48	.48***
Sex	0.03	-0.20	0.26	0.12	.01	.01	0.06	-0.10	0.21	0.08	.03	.03	0.09	-0.06	0.24	0.08	.04	.04	0.03	-0.23	0.29	0.13	.01	.01	-0.03	-0.16	0.10	0.07	-.02	-.02
Age	-0.01†	-0.03	0.00	0.01	-.06†	-.06†	0.01†	-0.00	0.02	0.01	-.08†	-.08†	0.00	-0.01	0.01	0.01	.04	.04	0.01	-0.01	0.03	0.01	.04	.04	-0.01	-0.01	0.00	0.00	-.05	-.05
Company size	0.04	-0.05	0.12	0.04	.03	.03	-0.01	-0.06	0.05	0.03	-.01	-.01	-0.01	-0.06	0.05	0.03	-.01	-.01	0.04	-0.05	0.14	0.05	-.04	-.04	0.04	-0.01	0.08	0.02	.07	.07
Position	0.06**	0.01	0.10	0.02	.10**	.10**	0.03†	-0.00	0.06	0.01	.08†	.08†	0.02	-0.01	0.05	0.01	.05	.05	0.06*	0.01	0.11	0.03	.10*	.10*	0.03	0.00	0.05	0.01	.09	.09
<b>Step2</b>																														
Constant	3.90***	3.79	4.02	0.06	.52	.52***	2.95***	2.88	3.02	0.03	.46	.46***	3.08***	3.01	3.16	0.04	.68***	.68***	2.38***	2.25	2.51	0.07	.34	.34***	3.15***	3.09	3.21	0.03	.43	.43***
Employee well-being (Time1)	0.61***	0.53	0.69	0.04	.59***	.59***	0.33***	0.24	0.41	0.04	.33***	.33***	0.68***	0.61	0.75	0.04	.68***	.68***	0.55***	0.45	0.65	0.05	.51***	.51***	0.30***	0.23	0.38	0.04	.33***	.33***
Sex	0.05	-0.18	0.28	0.12	.02	.02	0.04	-0.10	0.18	0.07	.02	.02	0.12	-0.02	0.27	0.07	.06	.06	0.04	-0.22	0.30	0.13	.01	.01	0.01	-0.10	0.13	0.06	.01	.01
Age	-0.01	-0.03	0.00	0.01	-.05	-.05	0.01**	0.00	0.02	0.00	.10**	.10**	0.00	-0.01	0.01	0.00	-.02	-.02	0.01	-0.01	0.03	0.01	.05	.05	0.03	-0.01	0.01	0.00	-.02	-.02
Company size	0.02	-0.07	0.10	0.04	.01	.01	-0.03	-0.08	0.02	0.03	-.04	-.04	-0.01	-0.06	0.05	0.03	-.01	-.01	0.04	-0.05	0.14	0.05	.04	.04	0.03	-0.01	0.07	0.02	.06	.06
Position	0.04†	-0.00	0.08	0.02	.07†	.07†	0.01	-0.01	0.04	0.01	.04	.04	0.02	-0.01	0.04	0.01	-.04	-.04	0.05†	-0.00	0.10	0.03	.08†	.08†	0.01	-0.01	0.04	0.01	.05	.05
Clan culture	0.21***	0.12	0.31	0.05	.22***	.22***	0.20***	0.15	0.26	0.03	.37***	.37***	0.13***	0.07	0.19	0.03	.19***	.19***	0.13*	0.03	0.24	0.05	.14*	.14*	0.24***	0.19	0.29	0.02	.53***	.53***
Market culture	0.01	-0.09	0.10	0.05	.01	.01	0.00	-0.06	0.06	0.03	.00	.00	-0.05†	-0.12	0.01	0.03	-.07†	-.07†	-0.06	-0.17	0.05	0.06	-.06	-.06	-0.07**	-0.12	-0.03	0.02	-.15**	-.15**
Interdependence	-0.14	-0.36	0.08	0.11	-.05	-.05	0.28***	0.14	0.41	0.07	.16***	.16***	-0.16*	-0.31	-0.02	0.07	-.08*	-.08*	0.06	-0.19	0.32	0.13	.02	.02	-0.09	-0.21	0.02	0.06	-.07	-.07
<b>Step3</b>																														
Constant	3.90***	3.78	4.02	0.06	.52	.52	2.93***	2.86	3.00	0.04	.47	.47	3.06***	2.99	3.14	0.04	.58	.58	2.36***	2.23	2.50	0.07	.35	.35	3.15***	3.09	3.21	0.03	.44	.44
Employee well-being (Time1)	0.61***	0.53	0.69	0.04	.59***	.59***	0.33***	0.24	0.42	0.04	.33***	.33***	0.68***	0.61	0.76	0.04	.68***	.68***	0.55***	0.45	0.65	0.05	.51***	.51***	0.30***	0.22	0.38	0.04	.33***	.33***
Sex	0.06	-0.17	0.28	0.12	.02	.02	0.05	-0.08	0.19	0.07	.03	.03	0.14	-0.01	0.28	0.07	.06	.06	0.07	-0.20	0.33	0.13	.02	.02	0.02	-0.09	0.14	0.06	.02	.02
Age	-0.01	-0.03	0.00	0.01	-.05	-.05	0.01**	0.00	0.02	0.00	.10**	.10**	0.00	-0.01	0.01	0.00	-.02	-.02	0.01	-0.01	0.03	0.01	.05	.05	0.00	-0.01	0.01	0.00	-.03	-.03
Company size	0.01	-0.07	0.10	0.04	.01	.01	-0.03	-0.08	0.02	0.03	-.05	-.05	-0.01	-0.07	0.04	0.03	-.02	-.02	0.04	-0.06	0.13	0.05	.03	.03	0.03	-0.01	0.07	0.02	.05	.05
Position	0.04†	-0.00	0.08	0.02	.07†	.07†	0.01	-0.01	0.04	0.01	.04	.04	0.01	-0.01	0.04	0.01	.03	.03	0.05†	-0.00	0.10	0.03	.09†	.09†	0.01	-0.01	0.04	0.01	.05	.05
Clan culture	0.21***	0.11	0.31	0.05	.21***	.21***	0.20***	0.14	0.25	0.03	.35***	.35***	0.12***	0.06	0.18	0.03	.18***	.18***	0.11*	0.00	0.22	0.06	.12*	.12*	0.23***	0.18	0.28	0.02	.51***	.51***
Market culture	0.01	-0.09	0.11	0.05	.01	.01	0.01	-0.05	0.07	0.03	.02	.02	-0.04	-0.11	0.02	0.03	-.06	-.06	-0.04	-0.15	0.07	0.06	-.04	-.04	-0.07**	-0.11	-0.02	0.02	-.13**	-.13**
Interdependence	-0.13	-0.36	0.10	0.12	-.04	-.04	0.31***	0.17	0.44	0.07	.18***	.18***	-0.13†	-0.28	0.02	0.08	-.07†	-.07†	0.08	-0.18	0.34	0.13	.03	.03	-0.08	-0.20	0.03	0.06	-.06	-.06
Interdependence × Clan culture	0.03	-0.10	0.16	0.07	.02	.02	0.10*	0.02	0.18	0.04	.10*	.10*	0.10*	0.02	0.19	0.04	.08*	.08*	0.16†	-0.01	0.32	0.08	.09†	.09†	0.06†	-0.00	0.13	0.03	.08†	.08†
Interdependence × Market culture	-0.02	-0.18	0.14	0.08	-.01	-.01	-0.06	-0.16	0.03	0.05	-.05	-.05	-0.04	-0.15	0.06	0.05	-.03	-.03	-0.16†	-0.34	0.03	0.09	-.08†	-.08†	-0.09*	-0.17	-0.01	0.04	-.10*	-.10*

Note. CI confidence interval, LL Lower limit, UL upper limit; Employee well-being (Time 1) = values at Time 1 for the dependent variables (i.e., Job satisfaction, organizational commitment, life satisfaction, eudaimonic happiness, interdependent happiness) in each regression model

† $p < .10$ . \*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$

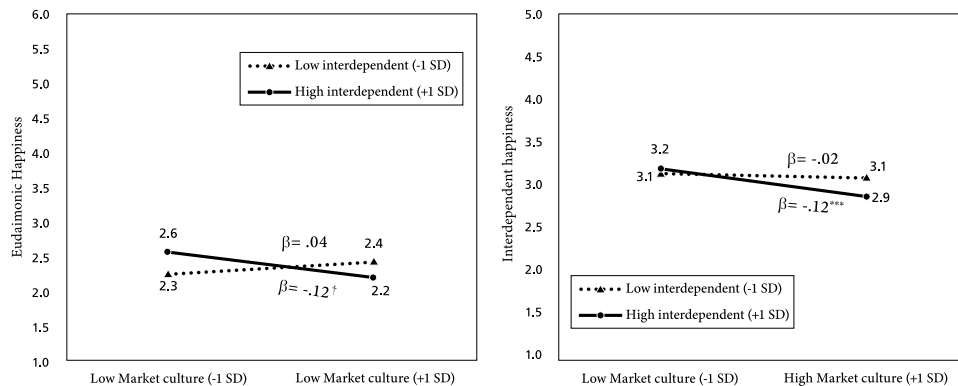


**Fig. 2** The effects of different levels of clan culture on different measures of employees’ well-being and their moderation by interdependence

Note. upper left= organizational commitment, upper right= life satisfaction, lower left= eudaimonic happiness, lower right= interdependent happiness. Note:  $**p < .01$ .  $***p < .001$

organizational contexts with more clan culture (O) showed the greatest well-being. Past research has shown that clan culture—an organizational orientation focusing on human resource development, cohesion, and morale—had positive effects on job satisfaction and organizational commitment

(Beus et al., 2020; Hartnell et al., 2019). In line with this literature, we found that clan culture predicted better well-being among Japanese employees across a broad range of well-being measures (i.e., job satisfaction, organizational commitment, life satisfaction, eudaimonic happiness,



**Fig. 3** The effects of different levels of market culture on different measures of employees’ well-being and their moderation by interdependence Note. left= eudaimonic happiness, right= interdependent happiness.  $^\dagger p < .10$ .  $***p < .001$

and interdependent happiness). Extending past research, our results also revealed that these effects of clan culture on well-being changed depending on employees' self-construal (i.e., interdependence). Specifically, we found that the effects of clan culture on employees' well-being were stronger for individuals holding more interdependent self-construals (i.e., they hold more group-oriented values and care about interpersonal relationships). This suggests that the combination of employees' interdependence and organizational clan culture constitutes an effective P-O fit, resulting in greater well-being. Because the well-being of employees with interdependent self-construals is much affected by the quality of interpersonal relationships they maintain within their organization (Uchida et al., 2004), and because an organizational clan culture values and supports interpersonal relationships (Cameron & Quinn, 2009; Quinn & Rohrbaugh, 1983), interdependence and clan culture seem to provide an ideal P-O fit for Japanese companies.

Moreover, the results revealed a negative effect on employees' well-being when employees with high levels of interdependence worked in an organization with a market culture—an organization oriented toward competition and efficiency. In this case, both employees' interdependent and eudaimonic happiness were lower.<sup>4</sup> This result was unexpected since market culture was not predicted to lead to poorer interpersonal relations within organizations. One of the differences between clan culture and market culture in the competing values framework is the degree to which organizations are internally or externally focused (Cameron & Quinn, 2009; Quinn & Rohrbaugh, 1983). Under an organizational context of market culture, people are competitive, trying to achieve high-performance targets. As long as this competitive spirit is directed towards the outside world (i.e., competition against another organization), it is conceivable that the cohesion among employees remains strong within organizations. However, interpersonal relationships can rapidly deteriorate if such competition is directed toward peers and develops among employees within an organization. Our results imply that there is a risk to interpersonal harmony in organizational contexts of market culture, at least in Japan, when employees hold interdependent self-construals. In these organizational contexts, employee well-being, in particular interdependent happiness, is reduced. Similarly, our results suggest that employees with more interdependence might lose a sense of purpose in life (i.e., experience lower eudaimonic happiness) if the quality of their interpersonal relationships at work is low because relationships with others often provide meaning to their lives<sup>2</sup>. Thus, our results suggest that

interdependence and market culture might not be a desirable combination as a P-O fit in Japan.

An abundance of P-O fit literature demonstrates that when the values of the person and the values of the organization do not align, employees will end up experiencing low levels of well-being. This is particularly problematic in Japan because here employees tend to remain in their jobs for long periods, and they do not change employment frequently (Nakabayashi & Morimoto, 2019; Sousa-Poza & Henneberger, 2004). In fact, we observed the average length of service in Japan was as long as 17.2 years. If employees with high interdependence belong to organizations with weak clan culture and strong market culture, our results suggest that their well-being might suffer. Given the well-established link between well-being and other organizational outcomes (Patterson et al., 2004), chronically low levels of well-being may ultimately lead to low organizational performance. Thus, a good P-O fit is particularly important in societies, such as Japan, where job mobility is low.

Considering that clan culture and interdependence constitute an effective P-O fit in Japan, managers might want to develop and maintain organizational cultures around the values of clan culture because it offers the best fit for the majority of their employees (i.e., scoring high on interdependence). In most organizations, however, there is a mix of different types of organizational cultures (Hartnell et al., 2019), and our data showed a relatively high positive correlation between clan culture and market culture. In order to keep up with global competition, organizations might need to reinforce only a subset of market culture characteristics. By doing so, organizations can sustain employee well-being by maintaining a proper balance between market culture and clan culture without endangering employees' experience of P-O fit.

## Theoretical implications

Past research has asked whether the effects of P-O fit are universal or vary from culture to culture (Oh et al., 2014; Treviño et al., 2020), and only a few studies have attempted to answer this question empirically (Chuang et al., 2015; Nyambegera et al., 2001; Treviño et al., 2020). To further generalize the effects of P-O fit, it is thus essential to diversify the samples testing the effects of P-O fit to new regions representing employees from a different cultural background. In particular, P-O fit studies from Japan are lacking. In a recent meta-analysis (Santos & De Domenico, 2015), P-O fit studies from Japan accounted for only 1.4% of all research, a much smaller percentage compared to other regions within Asia (e.g., studies in Korea and Taiwan accounted for about 6% of the total). The present study is thus one of a very few testing P-O fit among Japanese organizations and employees.

<sup>4</sup> It is important to point out that the analyses related to eudaimonic happiness should be interpreted with caution, as the residuals did not exhibit a normal distribution in the preliminary analysis and as the observed effect was only marginally significant.

The current study innovated P-O fit research by adopting a cultural psychology perspective focusing on employees' levels of interdependence. Cultural psychological research has shown that cognitions, sources of motivation, favorable feelings, and types of well-being can differ between independent and interdependent value systems (Markus & Kitayama, 1991). In order to get a detailed understanding of the effects of organizational culture on employees' well-being, it is necessary to adopt a holistic perspective of the people who belong to the organizations, including their levels of interdependence. This will enable the identification of the boundary conditions for the effects of organizational culture, as evidenced in the P-O fit literature.

The current study makes an important contribution to the organizational psychology literature, revealing the important relationship between P-O fit and well-being. Previously, P-O fit research has primarily focused on job attitudes, such as job satisfaction, organizational commitment, and turnover intention (Santos & De Domenico, 2015). This makes sense since personnel recruitment and retention are essential issues for corporate management. However, more recently, enhancing employee well-being has become an important issue for managers (Patterson et al., 2004), and the need for organizational psychologists to connect the P-O fit research with studies of employees' well-being/happiness in the workplace has been articulated (Fisher, 2010). This study takes the first steps towards this goal, empirically showing the positive effect of a P-O fit of clan culture with interdependence for the well-being of Japanese employees.

### Limitations and future directions

This study adds new findings to the P-O fit literature, but there are some limitations. The first limitation of our study is the multifaceted nature of the interdependence concept we used. Through an exploratory factor analysis, we discerned four distinct sub-components within interdependence. Subsequently, we investigated how the results with these sub-components differ from the ones with full scale. The outcomes varied across these sub-components, but 'interpersonal harmony' and 'prioritize group interests' yielded results consistent with the full-scale measure of interdependence. It's important to acknowledge that interdependence encompasses multiple facets and the alignment between interdependence (P) and clan culture (O) could be predominantly driven by 'interpersonal harmony' and 'prioritize group interests.'

The following limitation is that the interaction between interdependence and clan culture was not observed for all the outcome variables in the same way, the reason for which remains unclear. Prior research found that clan culture positively affected job satisfaction and organizational commitment (Hartnell et al., 2019). In particular, when P-O fit was high, job satisfaction and organizational commitment

increased (Van Vianen, 2018). However, we observed that the interaction between interdependence and clan culture was significant for organizational commitment but not for job satisfaction. One possible explanation is that clan culture may increase job satisfaction for people with lower levels of interdependence for reasons other than P-O fit. For example, people with lower levels of interdependence may also have high job satisfaction because they find it easier to work and achieve personal goals under organizational contexts of clan culture. Another explanation could be that the intense work that organizations put into developing their human resources, which is characteristic of organizational clan cultures, might raise job satisfaction for employees both with higher or lower levels of interdependence since it leads to personal growth.

Another limitation is that we had to reduce the number of items for many of the scales. While interdependent happiness used all items of the original scale, organizational commitment was measured with only two items. Job satisfaction, life satisfaction, and eudaimonic happiness were measured by single items respectively. Replication of the reported results using multiple-item scales is needed in future studies.

Future research is needed to address the role of independence for P-O fit. In the present study, we focused on interdependence because it is considered a central characteristic of East Asian cultures, including in Japan. However, to broaden these findings and to further connect the research from cultural psychology with the literature on P-O fit, it is also important to analyze P-O fit for employees scoring high on independence.

A further limitation pertains to the potential impact of the COVID-19 pandemic. The timing of our data collection spans the COVID-19 period. Around Time 1 (i.e., February 2021), several states of emergency and similar government measures were announced. These restrictions were lifted around the Time 2 (i.e., March 2022). Given this context, it's plausible that some respondents might have been engaged in remote work during the survey period. The presence or absence of remote work experience could potentially influence respondents' psychological experiences (Domae et al., 2023). For instance, participants who felt the presence of clan culture in their organizations despite lacking face-to-face interactions in a remote work environment might have rated their employee well-being higher than usual.

### Conclusion

This study contributes to a better understanding of person-organization fit in Japan. We found that clan culture yielded a more positive effect on Japanese employees' well-being (i.e., provided a stronger P-O fit), while market culture either had no or yielded a negative effect. Of note, both effects

were amplified among employees who were highly interdependent. Thus, this study also contributes to a better understanding of the mechanisms underlying strong P-O fit in Japan. We think that it is important to learn more about what organizational cultures result in higher P-O fit in East-Asian world regions, including Japan, because of their economic relevance and because they are non-Western cultures.

**Supplementary Information** The online version contains supplementary material available at <https://doi.org/10.1007/s12144-023-05389-0>.

**Funding** The authors did not receive support from any organization for the submitted work.

**Data and code availability** The datasets and the code generated during and analyzed during the current study are available from the corresponding author on reasonable request.

## Declarations

**Ethics approval** Approval was obtained from the ethics committee of Kyoto University Psychological Science Unit. The procedures used in this study adhere to the tenets of the Declaration of Helsinki.

**Consent** Informed consent was obtained from all individual participants included in the study.

**Competing interests** The authors have no relevant financial or non-financial interests to disclose.

**Open Access** This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>.

## References

- Beus, J. M., Solomon, S. J., Taylor, E. C., & Esken, C. A. (2020). Making sense of climate: A meta-analytic extension of the competing values framework. *Organizational Psychology Review, 10*(3–4), 136–168.
- Beus, J. M., Taylor, E. C., & Solomon, S. J. (2021). Climate-context congruence: Examining context as a boundary condition for climate-performance relationships. *The Journal of Applied Psychology, 106*(9), 1332–1356.
- Cameron, K. S., & Quinn, R. E. (2009). *Diagnosing and changing organizational culture: Based on the competing values framework*. First Press. (Original work published 2006 by John Wiley & Sons, Inc).
- Carr, J. Z., Schmidt, A. M., Ford, J. K., & DeShon, R. P. (2003). Climate perceptions matter: A meta-analytic path analysis relating molar climate, cognitive and affective states, and individual level work outcomes. *The Journal of Applied Psychology, 88*(4), 605–619.
- Chuang, A., Hsu, R. S., Wang, A.-C., & Judge, T. A. (2015). Does west “fit” with east? In search of a chinese model of person–environment fit. *Academy of Management Journal, 58*(2), 480–510.
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment, 49*(1), 71–75.
- Domae, H., Nakayama, M., Takemura, K., Watanabe, Y., Gobel, M. S., & Uchida, Y. (2023). Antecedents and consequences of telework during the COVID-19 pandemic: A natural experiment in Japan. *Preprint submitted to Humanities and Social Sciences Communications*. Retrieved October 13, 2023, from <https://doi.org/10.31234/osf.io/rxn4u>
- Fisher, C. D. (2010). Happiness at work. *International Journal of Management Reviews, 12*(4), 384–412.
- Gobel, M. S., & Miyamoto, Y. (2023). Self- and other-orientation in high rank: A cultural psychological approach to social hierarchy. *Personality and Social Psychology Review, 0*(0).
- Hartnell, C. A., Ou, A. Y., Kinicki, A. J., Choi, D., & Karam, E. P. (2019). A meta-analytic test of organizational culture's association with elements of an organization's system and its relative predictive validity on organizational outcomes. *The Journal of Applied Psychology, 104*(6), 832–850.
- Heine, S. J. (2005). Constructing good selves in Japan and North America. *Culture and Social Behavior: The Tenth Ontario Symposium, 95–116*.
- Heine, S. J., Lehman, D. R., Ide, E., Leung, C., Kitayama, S., Takata, T., & Matsumoto, H. (2001). Divergent consequences of success and failure in Japan and North America: An investigation of self-improving motivations and malleable selves. *Journal of Personality and Social Psychology, 81*(4), 599–615.
- Hitokoto, H., & Uchida, Y. (2015). Interdependent happiness: Theoretical importance and measurement validity. *Journal of Happiness Studies, 16*(1), 211–239.
- Hofstede, G. (1980). *Culture's consequences: International differences in work-related values*. Sage.
- Jung, Y., & Takeuchi, N. (2014). Relationships among leader-member exchange, person-organization fit and work attitudes in Japanese and Korean organizations: Testing a cross-cultural moderating effect. *International Journal of Human Resource Management, 25*(1), 23–46.
- Kristof-Brown, A. L., & Billsberry, J. (2013). Fit for the future. In A. L. Kristof-Brown & J. Billsberry (Eds.), *Organizational fit: Key issues and new directions* (pp. 1–18). Wiley Blackwell.
- Kristof-Brown, A. L., & Jansen, K. J. (2007). Issues of person-organization fit. In C. Ostroff & T. A. Judge (Eds.), *Perspectives on organizational fit* (pp. 123–153). Lawrence Erlbaum Associates Publishers.
- Kristof-Brown, A. L., Zimmerman, R. D., & Johnson, E. C. (2005). Consequences of individuals' fit at work: A meta-analysis of person-job, person-organization, person-group, and person-supervisor fit. *Personnel Psychology, 58*(2), 281–342.
- Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review, 98*(2), 224–253.
- McLaney, M. A., & Hurrell, J. J. (1988). Control, stress, and job satisfaction in Canadian nurses. *Work & Stress, 2*(3), 217–224.
- Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review, 1*(1), 61–89.
- Meyer, J. P., Hecht, T. D., Gill, H., & Toplonysky, L. (2010). Person–organization (culture) fit and employee commitment under conditions of organizational change: A longitudinal study. *Journal of Vocational Behavior, 76*(3), 458–473.
- Nakabayashi, M., & Morimoto, M. (2019). Japan's employment system from a historical perspective: Formation, expansion, and contraction of internal labor markets (Japanese). In *RIETI*



- Discussion Paper Series*. Research Institute of Economy, Trade and Industry (RIETI). <https://ideas.repec.org/p/eti/rdpsjp/19036.html>
- Norasakkunkit, V., & Uchida, Y. (2011). Psychological consequences of postindustrial anomie on self and motivation among Japanese youth. *The Journal of Social Issues, 67*(4), 774–786.
- Nyambege, S., Daniels, K., & Sparrow, P. (2001). Why fit doesn't always matter: The impact of HRM and cultural fit on job involvement of Kenyan employees. *Applied Psychology, 50*(1), 109–140.
- Oh, I. S., Guay, R. P., Kim, K., Harold, C. M., Lee, J. H., Heo, C. G., & Shin, K. H. (2014). Fit happens globally: A meta-analytic comparison of the relationships of person-environment fit dimensions with work attitudes and performance across East Asia, Europe, and North America. *Personnel Psychology, 67*(1), 99–152.
- O'Reilly, C. A., Chatman, J., & Caldwell, D. F. (1991). People and organizational culture: A profile comparison approach to assessing person-organization fit. *Academy of Management Journal, 34*(3), 487–516.
- Page, K. M., & Vella-Brodick, D. A. (2009). The “what”, “why” and “how” of employee well-being: A new model. *Social Indicators Research, 90*(3), 441–458.
- Park, J., & Kitayama, S. (2014). Interdependent selves show face-induced facilitation of error processing: Cultural neuroscience of self-threat. *Social Cognitive and Affective Neuroscience, 9*(2), 201–208.
- Patterson, M., Warr, P., & West, M. (2004). Organizational climate and company productivity: The role of employee affect and employee level. *Journal of Occupational and Organizational Psychology, 77*(2), 193–216.
- Quinn, R. E., & Rohrbaugh, J. (1983). A spatial model of effectiveness criteria: Towards a competing values approach to organizational analysis. *Management Science, 29*(3), 363–377.
- Rego, A., & Cunha, M. P. (2009). How individualism-collectivism orientations predict happiness in a collectivistic context. *Journal of Happiness Studies, 10*(1), 19–35.
- Ryff, C. D., & Keyes, C. L. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology, 69*(4), 719–727.
- dos Santos, L. B., & De Domenico, S. M. R. (2015). Person-organization fit: Bibliometric study and research agenda. *European Business Review, 27*(6), 573–592.
- Schneider, B., Goldstein, H. W., & Smith, D. B. (1995). The ASA framework: An update. *Personnel Psychology, 48*(4), 747–773.
- Shaw, J. D., & Gupta, N. (2004). Job complexity, performance, and well-being: When does supplies-values fit matter? *Personnel Psychology, 57*(4), 847–879.
- Sousa-Poza, A., & Henneberger, F. (2004). Analyzing job mobility with job turnover intentions: An international comparative study. *Journal of Economic Issues, 38*(1), 113–137.
- Straatmann, T., Königshulte, S., Hattrup, K., & Hamborg, K. C. (2020). Analysing mediating effects underlying the relationships between P-O fit, P-J fit, and organisational commitment. *International Journal of Human Resource Management, 31*(12), 1533–1559.
- Suhmann, M., Sassenberg, K., Nagengast, B., & Trautwein, U. (2018). Belonging mediates effects of student-university fit on well-being, motivation, and dropout intention. *Social Psychology, 49*(1), 16–28.
- Treviño, L. J., Egri, C. P., Ralston, D. A., Naoumova, I., Li, Y., Darder, F. L., de la Garza Carranza, M. T., & Furrer, O. (2020). A cross-cultural examination of person-organization fit: Is P-O fit congruent with or contingent on societal values? *Management International Review, 60*(2), 287–314.
- Uchida, Y., Norasakkunkit, V., & Kitayama, S. (2004). Cultural constructions of happiness: Theory and empirical evidence. *Journal of Happiness Studies, 5*(3), 223–239.
- Uchida, Y., & Oishi, S. (2016). The happiness of individuals and the collective. *The Japanese Psychological Research, 58*(1), 125–141.
- Van Vianen, A. E. M. (2018). Person-environment fit: A review of its basic tenets. *The Annual Review of Organizational Psychology and Organizational Behavior, 5*, 75–101.
- Wright, T. A., & Cropanzano, R. (2004). The role of psychological well-being in job performance: A fresh look at an age-old quest. *Organizational Dynamics, 33*(4), 338–351.
- Zheng, X., Zhu, W., Zhao, H., & Zhang, C. (2015). Employee well-being in organizations: Theoretical model, scale development, and cross-cultural validation. *Journal of Organizational Behavior, 36*(5), 621–644.

**Publisher's Note** Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.