



The Impact of Social Norms on Hybrid Workers' Well-Being: A Cross-Cultural Comparison of Japan and the United States

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ABSTRACT

Previous research has shown that workplace social norms influence employee well-being. However, such norms vary based on the cultures in which workplaces are embedded, suggesting that cultural differences may influence perceived norms about when and where work should occur. These differences, in turn, could impact employee well-being. Accordingly, through the lenses of cultural tightness-looseness and individualism-collectivism, this paper investigates cultural differences in perceived social norms, and the relationship between those norms and hybrid workers' wellbeing. We conducted a survey of 1,000 Japanese and 1,000 American hybrid workers. Results indicated that American respondents perceived stronger norms and demonstrated a higher willingness to conform to norms compared to Japanese respondents. Additionally, strong injunctive norms were positively associated with well-being among Americans but not among Japanese. Interviews (N = 24) showed that Japanese perceived injunctive norms negatively, while Americans saw them positively. We discuss implications for future remote-collaboration technologies in hybrid-work settings.

CCS CONCEPTS

Human-centered computing → Empirical studies in HCI.

KEYWORDS

Hybrid Work, Well-Being, Social Norms, Cross-Cultural Comparison

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1 INTRODUCTION

As the COVID-19 pandemic recedes, hybrid work—defined as "working part of the time in the office and part time from somewhere else" [122, p. 8]—is gaining in popularity [8, 115, 132]. This has prompted researchers to examine the effects of remote work on employee well-being, defined as "a combination of feeling good and functioning effectively" [70, p. 838], particularly during transitions in work modalities that were mandated by governments during the pandemic. Yet, their findings have been inconclusive, and have not even reached an agreement about whether the valence of the well-being effects of remote and hybrid work is positive or negative [89, 101, 138].

While remote and hybrid work confer employees with both flexibility and autonomy in terms of when and where they work [4, 53, 83, 121, 133], they can also intensify feelings of loneliness and isolation [4, 27, 121], potentially worsening well-being issues such as depression and anxiety [25, 98, 102]. However, looking beyond the effects of physical and temporal separation from one's colleagues, another potential factor contributing to the above-mentioned inconsistent findings is variance in workplace social norms.

These norms encompass shared beliefs about what sort of behavior is acceptable in a workplace [24]. In recent years, the establishment of workplace social norms has emerged as a crucial approach through which organizations can address the uncertainties caused by the COVID-19 pandemic and support employees' transitions to remote work [34, 81, 120, 128]. The strength of such norms can have a positive or negative impact on employee well-being. The existence of strong social norms provides employees with clear guidance about what they should do [56, 57], and thus mitigates uncertainties, which are positively correlated with emotional exhaustion [10, 19, 127]. Reducing exhaustion can be seen as an enhancement of well-being. Additionally, conforming to social norms often provides individuals with a sense of "feeling right" within a group, which can also improve their well-being [52, 60, 106]. Nevertheless, a survey of 212 Japanese hybrid workers by Akahori et al. [3] made it clear that the existence of strong norms does not proceed to well-being in a straight line. That is, the respondents who perceived injunctive norms to be strong experienced lower well-being than those who did not, whereas higher well-being was experienced by those with a greater willingness to conform to such norms.

Moreover, both the prevailing set of perceived social norms and the relationship between those norms and people's well-being are likely to vary depending on the national/regional culture in which a workplace is embedded. Firstly, cultural 'tightness', i.e., the strictness of rules against and penalties for deviant behavior [64], differs by country [17, 57, 125], and employees in 'tight' workplace cultures might be more likely to perceive social norms as strong. Additionally, there is national variation in individualist and collectivist values [67, 68] that differ in the relative importance of personal versus group goals [126]. Thus, members of workplaces in collectivist cultures may have a higher willingness to conform to the social norms they perceive. Further, individuals from cultures with a collectivist orientation tend to enhance their well-being through harmonizing with the group [77], implying that social norms could play a prominent role in well-being in such places [118]. Therefore, understanding cultural differences in perceived social norms and their relationship to well-being is crucial when designing technologies for hybrid work settings.

In this study, through the twin lenses of cultural tightness-looseness [56] and individualist-collectivist values [126], we investigate how perceived social norms differ across hybrid work settings in Japan and the United States, as well as how such differences impact work-place well-being. We chose these two countries because Japan is characterized by a collectivistic culture with strong social norms, while the United States has an individualistic culture with weak social norms [57, 67, 68]. Moreover, a growing number of companies in both Japan and the United States are transitioning from remote work to office-based work [45, 100]. Uncovering the correlation between employees' awareness of their work arrangements and their well-being holds significant importance for corporate leaders in both countries. Specifically, we aim to answer the following research questions:

- RQ1. How do Japanese and American hybrid workers share similarities and differences in their perceptions of social norms?
- RQ2. Does the relationship between hybrid workers' perceived social norms and their workplace well-being differ across Japan and the U.S.? If so, how does each group navigate this relationship?

Building on prior research [3], we collected data on 1) social norms about when and where to work and 2) workplace well-being through online surveys of 1,000 Japanese and 1,000 American individuals, followed by interviews with 12 Japanese and 12 American hybrid workers. Interestingly, while previous studies have indicated that the U.S. has weaker social norms than Japan [17, 57, 125], we found that Americans reported stronger social norms about when and where to work compared to their Japanese counterparts. Additionally, despite Japan's collectivist cultural orientation, which emphasizes harmony in relationships [126], our research revealed that Japanese people were less willing to conform to social norms regarding when and where to work than Americans were. Moreover, despite America's individualist cultural orientation, which emphasizes personal autonomy over concern for the group [126], our data suggest that Americans who encounter strong expectations from their colleagues regarding when and where to work tend to exhibit higher workplace well-being. Our Japanese participants

did not exhibit this pattern, in keeping with prior research findings that such stringent expectations tend to decrease workplace well-being for them [3]. Moreover, the American participants in our interviews described injunctive norms as a foundation for making themselves comfortable at work, whereas Japanese participants saw such norms as burdensome restrictions on their freedom. These differences imply that even when exposed to similar social norms, employees from different cultural backgrounds may perceive and react to them differently, and this could influence their well-being in distinct ways.

The main contributions of our study are as follows:

- We reveal unexpected patterns in the perceptions of social norms among hybrid workers in Japan and the U.S., based on a large-scale survey involving 1,000 people from each country.
- We show that cultural variation is associated with distinct perceptions of social norms, and with different relationships between those norms and well-being.
- We offer insights into the culturally sensitive design of remote collaboration and other hybrid work technologies aimed at boosting employee well-being.

2 RELATED WORK

2.1 Shift to hybrid working model and its effects on employee well-being

Remote work has become common worldwide since the start of the COVID-19 pandemic, but discussions of its effectiveness have been carried out for much longer (e.g., [4, 53, 121]). Pre-pandemic research indicated that remote work was positively correlated with flexibility and autonomy [4, 53, 83, 121, 133], and negatively correlated with stress [33, 53], turnover intentions [58], and work-family conflict [4, 33, 53]. These relationships are not all straightforward, however. For example, Golden and Veiga [59] argued that the impact of remote work on well-being depends on factors such as task interdependence and job discretion, while Gajendran and Harrison [53] demonstrated that remote work influences perceived autonomy, which in turn mediates desirable outcomes such as job satisfaction, performance, and continued employment. However, although pre-pandemic remote work was generally chosen voluntary, from 2020 to the present it has often been mandated. Under these circumstances, most employees initially had little to no experience with remote work, and efforts to prepare them for it were often insufficient [72].

The shift to mandatory remote work may have had a detrimental effect on employee well-being. Harms include the absence of a daily routine, lack of social contact, blurred work-life boundaries, higher workloads, increased work hours, and a new need to adjust one's work hours around others' [51, 110, 134]. However, some studies that looked for significant correlations between remote work and decreased well-being did not find any [92, 138, 139]. As such, a clear consensus has not been reached on the relationship between well-being and post-COVID-19 remote working.

Amid the ongoing containment of COVID-19, hybrid working—which combines remote and office work—is becoming prevalent. With hybrid work, too, there is no definitive conclusion as to whether it has a positive or negative effect on employee well-being.

At the time of writing, employees tend to view the hybrid-working model positively [8, 115, 132], and scholars have hailed its abilities to reduce costs, increase employee efficiency and productivity, and boost recruitment efforts [6, 87, 90]. Tran [124] recently demonstrated the positive impact of hybrid working on job satisfaction, collaboration, and communication. On the other hand, drawbacks of the hybrid model have also been highlighted. For example, Konovalova et al. [82] pointed out challenges related to socialization, emotional burnout, widening disparities among members of hybrid teams working in office-based versus remote formats, and gender inequality. Worryingly, Juchnowicz and Kinowska [75] found that working remotely for as little as one day per week can lead to lower well-being in interpersonal relationships compared to the parallel well-being of people who do no remote work at all.

In short, due to the complex interplay between the impact of the COVID-19 pandemic and the rapid, ongoing changes in working practices, consistent results regarding the impacts of remote and hybrid working on employee well-being have not been obtained. Moreover, there has been a recent movement in some companies to revert to office work due to skepticism about the effectiveness of remote work [45, 100]. Therefore, understanding the relationship between flexible work arrangements and employee well-being is meaningful in corporate decision-making and in shaping a comfortable workplace environment.

2.2 Impact of social norms on well-being

One of the factors making it difficult to understand post-COVID-19 hybrid work is that workplace social norms are in a state of flux. Social norms are beliefs shared among group members about what behavior is acceptable, and can be divided into two types: injunctive norms, i.e., perceptions of what should generally be approved of or disapproved of by others, and descriptive ones, i.e., perceptions of what others generally do [24]. Numerous studies on social norms have revealed their power to motivate people's behaviors (e.g., recycling and littering) in a variety of situations [24, 76, 112]. The COVID-19 pandemic has brought about significant shifts in the workplace, including but not limited to the transition to remote work and the introduction of new policies and procedures [81]. At the same time, it has given employees the opportunity to reconsider their work-related values, including the importance they assigned to autonomy and work-life balance. These simultaneous changes in working environments and in employees' values may make it challenging for people to align with social norms, and thus may lead to a decrease in employee well-being [16, 26, 94]. Likewise, in hybrid-work settings, social norms about when and where to work may not be sufficiently established, and much remains unknown about how social norms are perceived and how they relate to workplace well-being.

A considerable body of research has reported that social norms influence people's well-being. Such influence can be attributed to two main factors: the strength of the norms themselves [3, 40, 88], and the degree to which people conform to them [3, 52, 60, 106]. A high level of the former, i.e., a tight culture, implies many strongly enforced rules and little tolerance for deviance [64]. One explanation for the positive impact of strong social norms on well-being is that they provide clear guidelines [56, 57], making individuals less

susceptible to the emotional fatigue that can be caused by dealing with uncertainty [10, 19, 127]. However, according to the research findings of Akahori et al. [3], there is a negative relationship between a strong injunctive norm regarding when and where to work and the well-being of Japanese hybrid workers. They suggest that a strong injunctive norm may impair employees' flexibility and autonomy, potentially leading to a decrease in well-being.

Conformity to social norms, i.e., person-culture fit, is generally evaluated in terms of the similarity between the values of the individual and those of their organization or group [104]. Personculture fit has been shown to be positively related to employees' job satisfaction [1, 84, 85, 104] and psychological well-being [52], and negatively related to their turnover intentions [84, 85, 104]. One explanation for the positive well-being impact of conforming to social norms is that individuals who do so feel a sense of correctness within themselves, which in turn amplifies their positive emotions [52, 60, 106]. Indeed, Akahori et al. [3] found that willingness to conform to descriptive norms was positively correlated with well-being when people were in the office. They suggest that when working outside the workplace, individuals often worry about being perceived as not putting in enough effort, while in the office, there is a greater sense of reassurance in conforming to the norms of one's surroundings.

As discussed above, in the midst of the evolving social norms regarding when and where to work, the strength and conformity of these norms have become evident in terms of their impact on the well-being of hybrid workers. However, the study by Akahori et al. [3] focuses exclusively on Japan, and it is possible that social norms are perceived differently based on culture, which in turn may lead to varying effects on well-being.

2.3 Cultural differences of social norms and well-being

Perceived social norms and well-being are known to vary nationally due to cultural differences [46, 65, 130]. In previous studies, two significant cultural dimensions are commonly associated with social norms. The first is cultural tightness/looseness, i.e., variation in the strength of social norms among countries. Examples of tight-culture countries are India, Singapore, and Japan, and of loose-culture ones, Hungary, Spain, and the U.S. [57]. Cultural tightness is thought to enhance social cooperation within groups, and has been cited in explanations of cultural differences in how ecological and social threats are addressed [57, 107]. This pattern was also observed during the COVID-19 pandemic, when nations with tight cultures suffered fewer COVID-19 cases and deaths than nations with loose ones [55].

The second key dimension of social norms, for the purposes of the present research, is individualism/collectivism. According to Triandis et al., collectivistic cultures are characterized by "self-definition as part of group(s), subordination of personal goals to ingroup goals, concern for the integrity of the ingroup, and intense emotional attachment to the group" [126, p. 335]. In contrast, individualistic cultures are characterized by "self-definition as an entity that is distinct and separate from group(s), emphasis on personal goals even if pursuit of such goals inconveniences the ingroup, and less concern and emotional attachment to the ingroups" [126, p.

335]. Individualistic values tend to be more prominent in North America, Western Europe, and the Nordic countries, and collectivistic ones in Asia, Latin America, and Africa [67, 68].

The individualism/collectivism dimension is also commonly utilized in cross-cultural studies on people's well-being [37, 103, 111]. For example, countries with individualistic cultures report higher levels of subjective well-being than countries with collectivistic ones [48], and their well-being is strongly associated with self-esteem [36]. Members of collectivistic cultures are more likely to associate well-being with harmony in relationships [77]. Suh et al. [118] have demonstrated that emotions predict individual life satisfaction more strongly than social norms do in individualistic cultures, whereas in collectivistic cultures, both predict life satisfaction to the same extent. This may imply that, in collectivist cultures, the normative desirability of well-being influences individual well-being. Such findings also align with the emphasis on personal goal attainment in individualistic cultures and on collective goal attainment in their collectivistic counterparts [126].

In light of this background, we expect that national culture will have a significant influence on workers' perceptions of social norms regarding when and where to work, as well as on the relationship between such norm perceptions and well-being. If that is indeed the case, it will likely be necessary to adapt the designs of remote collaboration technologies aimed at enhancing hybrid workers' well-being to align with their cultural and cross-cultural social-norm contexts.

2.4 Workplace technologies

Previous HCI studies have explored various technologies to support employee productivity and well-being. These include tools for recording daily work summaries [5], promoting physical activity during break times [15], and an exploration of the potential value of assessing stress levels in remote workers based on passively sensed information [97]. In the field of HCI, there is a growing focus on examining the impact of the forced introduction of remote work due to the COVID-19 pandemic on workplace collaboration and work practices [30, 31, 44, 137]. Accordingly, discussions have begun on the roles these technologies play for employees adapting to new ways of working and how they should be designed. For example, Cho et al. [21] discovered that policies regarding accountability and surveillance technology during remote work can create stress, guilt, and anxiety among employees because they are expected to maintain the same level of productivity as in the office, even when working from home. This suggests that time, work, and productivity concepts should be reconsidered when designing technologies to support remote work. Additionally, Chowdhary et al. [22] have pointed out that power structures inherent in the workplace can lead to implicit compliance with technology when introducing technologies to optimize employee productivity and enhance well-being. This can raise privacy and ethical concerns. Furthermore, Akahori et al. [3] suggest that enhancing colleague awareness [41, 42, 63] can increase employee well-being, especially as suspicions and anxieties about productivity in remote settings may stem from a lack of visibility of work. However, especially for employees with a low willingness to conform to descriptive norms, bringing the gaze of others into their homes may increase stress.

Therefore, it is recommended to adopt non-invasive approaches that do not impose excessive burdens or stress on employees.

As discussed above, it has become apparent that employees experience well-being challenges arising from social factors such as social pressure and expectations when utilizing technologies aimed at supporting productivity and well-being in the workplace. When such social factors vary across cultures, a one-size-fits-all approach may not be desirable. In addition, the field of HCI often emphasizes the concept of social norms in the design of information technology, but this discussion is more frequently seen in online community formation [18, 80, 96, 113, 119], with limited discourse in the workplace domain [3]. Therefore, our key objectives are to cross-culturally explore 1) differences in the perceived social norms, and 2) the relationship between these norms and well-being, in the tight, collectivistic culture of Japan and the loose, individualistic culture of the U.S., and to delve into the significance of design adapted to cultural contexts in the hybrid work settings.

3 METHODS

This study investigates the experiences of hybrid workers in Japan and the United States, focusing on how perceived social norms within each cultural context impact employee well-being. A mixed-methods approach is employed to understand the complexities of cultural influences comprehensively. The research used online surveys to efficiently collect data about perceptions of social norms and employee well-being. Additionally, semi-structured interviews were conducted to provide deeper insights into the quantitative results and to understand the relationship between perceived social norms and well-being. This study was approved by our institution's Institutional Review Board (IRB).

3.1 Online surveys

3.1.1 Participants. From February 22, 2022 to March 6, 2022, through a market-research company, we collected 2,000 online-survey responses from Japan and the U.S. (1,000 from each country). Prospective participants were provided with an overview of this research and an informed-consent form, and those who gave their consent proceeded to the first part of the survey itself, known as the screening survey, consisting of questions about their individual backgrounds. The second, main part of the survey included questions about hybrid-working environments' 1) perceived social norms and 2) workplace well-being.

Participation in the main survey was restricted to residents of Japan and the U.S. who had at least three months' experience of hybrid work, belonged to a team, and were between 18 and 64 years old. For this purpose, we defined a team as a group of people who work daily on a common project or goal and share the same office space when they come to work. Table 1 lists the statistics of the main survey's respondents. Most were company employees, public officials, faculty members, or non-profit organization staff. After completing the main survey, participants received a pre-arranged amount of compensation from the market-research company.

3.1.2 Measures. In this study, we utilized rating scales of varying sizes to measure perceived social norms: specifically, reference behavior, strengths of injunctive and descriptive norms, and willingness to conform to injunctive and descriptive norms. To measure

Attribute	Range	Sample size (JP)	Sample size (US)	
	18-24	3 (0.3%)	51 (5.1%)	
	25-34	67 (6.7%)	294 (29.4%)	
Age	35-44	140 (14.0%)	416 (41.6%)	
	45-54	365 (36.5%)	174 (17.4%)	
	55-64	425 (42.5%)	65 (6.5%)	
Gender	Male	880 (88.0%)	622 (62.2%)	
Genuer	Female	120 (12.0%)	378 (37.8%)	
	General employee	487 (48.7%)	321 (32.1%)	
	Managerial employee	374 (37.4%)	421 (42.1%)	
Role	Operator, executive	50 (5.0%)	131 (13.1%)	
	Professional, research	16 (1.6%)	119 (11.9%)	
	Others ^a	73 (7.3%)	8 (0.8%)	
	Planning, public relations	78 (7.8%)	32 (3.2%)	
	Sales	220 (22.0%)	96 (9.6%)	
	Manufacturing, production	48 (4.8%)	127 (12.7%)	
	Procurement, purchasing	25 (2.5%)	27 (2.7%)	
Tab automorphis	Production control, quality control	45 (4.5%)	54 (5.4%)	
Job category	Technology, research & development	189 (18.9%)	305 (30.5%)	
	General affairs, human resources	127 (12.7%)	96 (9.6%)	
	Accounting, finance	50 (5.0%)	85 (8.5%)	
	Information system division	114 (11.4%)	58 (5.8%)	
	Others	104 (10.4%)	118 (11.8%)	
Evanuary of variety	1-2 days a week	575 (57.5%)	488 (48.8%)	
Frequency of remote work	3-4 days a week	425 (42.5%)	512 (51.2%)	

Table 1: Demographics of online survey participants from Japan (JP) and the United States (US).

workplace well-being, a multi-item rating scale was used. All variables apart from the country variable were the same as in a previous study [3]. Further details about the survey can be found in the Supplemental Material.

Reference behavior. To capture perceptions of social norms, it is imperative to clearly define the relevant behaviors [2]. In the context of hybrid work, variations in socially acceptable practices across workplaces pose a challenge in establishing uniform guidelines for employee reference. The study specifically inquired about the expected frequency of remote work as a reference behavior, recognizing its potential influence on the relationship between perceived social norms and well-being. *Reference behavior* was measured using a single item, "My team members think that I should work under the following work arrangements", with the following mutually exclusive answer options: "Come to the office every day", "Work remotely less than 1 day a week", "Work remotely 1–2 days a week", "Work remotely 3–4 days a week", and "Work remotely every day".

Strengths of injunctive and descriptive norms. Based on Ajzen's [2] sample questionnaire, the *strength of injunctive norms* was measured using a single item, "How strongly do your team members think that you 'should follow' the work arrangements you selected in [the question on the reference behavior]?" Responses were provided on a seven-point Likert scale ranging from 1 = "They

don't think I 'should follow' the work arrangements at all" to 7 = "They strongly think I 'should follow' the work arrangements". *Strength of descriptive norms* was also measured using a single item, "Most of my team members come to the office with a similar frequency". This was answered on a different seven-point Likert scale ranging from 1 = "Strongly disagree" to 7 = "Strongly agree".

Willingness to conform to injunctive and descriptive norms. Based on Ajzen's [2] sample questionnaire, willingness to conform to injunctive norms was measured using a single item, "I want to come to the office as often as my team members expect me to". This was measured on a seven-point Likert scale ranging from 1 = "Strongly disagree" to 7 = "Strongly agree". Willingness to conform to descriptive norms was measured using the same Likert scale and again with a single item, "I want to come to the office about as often as other team members do".

Overall well-being. Based on the workplace PERMA profiler [79], our measurement of overall well-being utilized 16 items and an 11-point Likert scale ranging from 0 = "Never" to 10 = "Always". The workplace PERMA profiler is based on the five factors of the PERMA model—positive emotion, engagement, relationships, meaning, and accomplishment—and has demonstrated acceptable psychometric properties in assessments conducted with large international samples [14]. In this case, its internal consistency for overall well-being

a: Public official, faculty member, non-profit organization staff.

was high ($\alpha_{JP}=.96, \alpha_{US}=.94$) in both the Japanese and American samples.

3.1.3 Analysis. To answer our research questions, hierarchical linear regression was used. Specifically, overall well-being was entered as the outcome variable, perceived social norms as the predictor variable, and the country—dummy-coded, with Japan as the reference category—as a moderating variable.

Our initial model predicted workplace well-being using covariates (age, gender, and job role). The two categorical covariates, gender and job role, were dummy-coded, with male and general employees as the reference categories. In our second model, we added five variables related to perceived social norms and the dummy-coded country variable mentioned above. Finally, our third model added interaction terms between the dummy-coded country variable and each of the second model's predictor variables and covariates. By comparing these three models' results, we can ascertain which variables contribute to model improvement, observe changes in model fit, and ultimately select the model that best fits our data.

3.2 Semi-structured interviews

3.2.1 Participants. We conducted semi-structured interviews with 24 hybrid workers, 12 from Japan and 12 from the United States. All interviewees were recruited in 2023 through the same market-research company that conducted our online survey, but none were survey respondents. All interviews were conducted via video conferencing.

The interviewees were provided with a research overview and an informed-consent form, and those who then agreed to participate were asked to complete the same screening questions used in the online survey. To ensure consistency with the online survey, the inclusion criteria for interviewees were exactly the same as for survey respondents. In addition, to gather opinions from a diverse group of hybrid workers, we aimed to have participants of various genders, age groups, roles, and job categories to ensure a broad representation. The interviewees' background information is presented in Table 2.

The semi-structured interviews each lasted approximately 60 minutes and were conducted in Japanese with the Japanese participants and in English with the American participants. The interview topics included the current state of hybrid-working models, the impact of the COVID-19 pandemic, social norms related to work timings and locations, job satisfaction, and sources of stress.

More specifically, the interviewees were asked about their perceptions of social norms, with the purpose of understanding how strongly they are aware of these norms and to what extent they desire to conform to them. The questions included inquiries about whether these norms were overt or subtle, the advantages of conforming to them, and the disadvantages of not doing so. The Supplemental Material provides details of our interview guide. After their respective interviews, these 24 participants received the specified compensation from the market research company.

3.2.2 Analysis. All interviews were audio-recorded and transcribed for analysis. The transcribed data were then analyzed using reflective thematic analysis [11], as a means of gaining deeper insights into our quantitative analysis results and identifying opportunities

for future technological design. All members of our research team were engaged in the qualitative analysis. One formerly lived in North America and is a native English speaker, while the remainder are native Japanese speakers. The interview transcripts were analyzed in their original language.

First, the lead author repeatedly read through the transcribed texts while actively, analytically, and critically engaging with the words to become familiar with the dataset as a whole [12]. The same author then used MAXQDA software to code the data.

The initial codes were reviewed multiple times during the coding process, and when necessary, code splitting, integration, and re-coding were performed. Next, the coded data were examined to identify similarities and overlaps between codes. Then, broad topics and issues—i.e., the initial themes—were identified based on the aggregation of codes. Subsequently, all authors reviewed the coded transcripts and associated themes, and deliberated on their validity. After iterative analysis, discussion, and refinement, the team reached a consensus on all themes.

4 RESULTS

4.1 Similarities and differences in perceived social norms (RQ1)

To answer RQ1, regarding whether Japanese and American hybrid workers differ significantly in their perceptions of social norms, we subjected our survey data to Wilcoxon rank-sum tests with continuity correction. Table 3 presents statistics of the variables along with the Wilcoxon results.

Our findings revealed that, compared to their American counterparts, Japanese hybrid workers perceived social norms as significantly less strong. Their willingness to conform to norms was also significantly weaker and their well-being was significantly lower, all at the p < .001 level. On the other hand, no significant difference was observed between Japanese and American hybrid workers' reference behavior, i.e., expectations about the frequency of remote work.

4.1.1 Social norm of accountability in remote work. To additionally help us answer RQ1, we analyzed the interview data for further evidence of how Japanese and American hybrid workers perceive social norms. This established that there were several similarities and differences in the two groups' perceptions of social norms.

Hybrid workers in both countries recognized the social norms regarding accountability in remote work. Both the Japanese and the American interviewees told us they had heard colleagues express uncertainty about colleagues' work status during remote work—and even, in some cases, skepticism that any work was being done. Therefore, both groups of participants strove to be accountable for their work to dispel such suspicions and enact a flexible work style. JP9, for example, lamented the high volume of chat notifications received from fellow team members in remote work, essential for upholding the cultural practice of *ho-ren-so* (reporting, informing, consulting) to ensure accountability.

"However, considering that I've gained extra free time through working remotely [i.e., by spending less time US12 Female

ID	Gender	Age	Role	Job category	Frequency of remote work
JP1	Male	35-44	Manager	Sales	1-2 days a week
JP2	Male	55-64	Manager	Production control, quality control	1-2 days a week
JP3	Female	35-44	Employee	Planning, public relations	3-4 days a week
JP4	Female	35-44	Employee	Information systems division	3-4 days a week
JP5	Female	55-64	Employee	Sales	3-4 days a week
JP6	Female	45-54	Employee	Accounting, finance	1-2 days a week
JP7	Male	45-54	Manager	Information systems division	1-2 days a week
JP8	Male	25-34	Employee	Planning, public relations	1-2 days a week
JP9	Male	35-44	Manager	Accounting, finance	1-2 days a week
JP10	Male	45-54	Employee	General affairs, human resources	3-4 days a week
JP11	Male	55-64	Manager	Technology, research & development	1-2 days a week
JP12	Female	25-34	Employee	Planning, public relations	3-4 days a week
US1	Male	25-34	Employee	Information systems division	1-2 days a week
US2	Female	18-24	Employee	Policy	3-4 days a week
US3	Female	55-64	Employee	Planning, public relations	3-4 days a week
US4	Female	55-64	Employee	Social Services	3-4 days a week
US5	Male	45-54	Employee	Information systems division	3-4 days a week
US6	Male	35-44	Manager	Manufacturing, production	1-2 days a week
US7	Female	45-54	Employee	Administrative	1-2 days a week
US8	Male	45-54	Manager	Accounting, finance	1-2 days a week
US9	Male	35-44	Employee	Production control, quality control	1-2 days a week
US10	Female	18-24	Employee	Marketing management	1-2 days a week
US11	Male	35-44	Manager	Internal communications	1-2 days a week

Table 2: Demographics of interview participants from Japan (JP) and the United States (US).

Table 3: Variables' means (M), standard deviations (SD), and Wilcoxon rank-sum test results with continuity correction, by participants' nationality.

Consulting

Employee

Variable	Japa	anese	American		W-value	P-value	
	M	(SD)	M	(SD)			
Overall well-being	5.7	(1.7)	7.7	(1.5)	173790	<.001 ***	
Reference behavior		(0.8)	3.3	(0.8)	509402	.424	
Strength of injunctive norms		(1.3)	5.1	(1.5)	376566	<.001 ***	
Willingness to conform to injunctive norms		(1.3)	5.4	(1.4)	290451	<.001 ***	
Strength of descriptive norms		(1.5)	5.6	(1.3)	292486	<.001 ***	
Willingness to conform to descriptive norms	4.3	(1.4)	5.5	(1.3)	269409	<.001 ***	

commuting], it's ironic that this over-frequent communication makes it feel like coming to the office might be more convenient." (JP9)

Accountability is likewise valued in the U.S. US11, who held a managerial position, stated that due to the belief that some employees might abuse remote work, there is a need to find accountability measures in hybrid work:

"I'm not a fan of mandating certain things [...], but if I were to write something up, I would probably say that in hybrid work, you have to be present for eight hours. It is expected of you to get back in a timely manner and you have to meet deadlines. And while that's not much

different from in-office, those should be the mainstays of working hybrid." (US11)

3-4 days a week

In both Japan and the United States, there was a shared norm of emphasizing accountability in remote work, with the belief that individuals should remain dedicated to their work even in a remote setting.

Furthermore, in both countries, there were implicit penalties for not conforming to the accountability norms. Specifically, suspicions about remote employees resulted in negative performance evaluations and increased surveillance. For example, JP7, a manager, felt stressed when subordinates worked from home without specific reasons like childcare responsibilities, and gave them negative

employee evaluations, although did not directly communicate the issue to employees.

"In my company, we conduct a survey every two weeks with the same set of questions. People who live alone often write various things about not being able to establish a daily routine. Still, if they hardly come to the office, I sometimes want to say, 'If you're not coming to the office almost at all, you should come in every day and regain your daily rhythm.' But I can't say that." (JP7)

Heightened surveillance was also reported in both countries. Some companies tracked employees' computer activity during remote work, alerting managers to departments with reduced usage or productivity. While intended to alleviate managers' concerns, there were worries that such monitoring could lead to gossip, strain relationships, and damage team morale. For example, US6 noted:

"If you're going to track things, it needs to be a legit tracking, and it needs to be for everybody. Because what happens is the swirl goes around, 'Did you hear what happened over here? Did you see that email?' I'm like, 'No. Do your job. Just come in when you're supposed to and don't worry about it.' That swirl is a cancer that just spreads, and creates chaos, and is just unneeded morale-killer." (US6)

In Japan and the United States, skepticism towards remote work extended beyond mere doubt, as implicit penalties existed, such as diminished job evaluations and increased surveillance measures when accountability was not adequately fulfilled.

In summary, hybrid workers in Japan and the United States recognized the social norm of visibly demonstrating their daily productivity, even when working remotely. Moreover, violations of this norm could result in implicit penalties such as decreased job evaluations and intensified surveillance measures. Consequently, they needed to adeptly adapt to the social norm of accountability during remote work.

4.1.2 Fostering social norm establishment and understanding through social connections. In both countries, hybrid workers emphasized the importance of building trust relationships to align with the social norm of accountability. Specifically, they built trusting relationships through social connections to dispel suspicions of not being diligent in remote work. However, the emphasis on social connections differed significantly between American and Japanese participants, and the difference explains some of the quantitative results

Japanese interviewees associated social connections with resolving grievances and improving group cohesion. In Japan, the culture of "nominication", a portmanteau of *nomi* (drinking) and "communication", involves open conversations with individuals in different positions during drinking gatherings. JP11, a manager, mentioned its critical role in building trust.

"Initially, when a new employee joined, suggestions that we go for a drink or engage in some light-hearted conversation would often be met with resistance, and they wouldn't do it. However, persistently inviting them has succeeded in convincing these younger individuals to participate. Through these social gatherings, where various complaints and grievances are discussed, whether about the company or other matters, the team somehow comes together more cohesively." (JP11)

JP4 lamented the disappearance of a culture in their team where monthly nominications were held, a practice that was disrupted due to COVID-19.

"I don't even recognize the faces of new employees anymore, and I don't even know who's there. Also, quite a few people who used to get along well have left. I still think it's important for everyone to gather and eat together maybe once a month or something like that." (JP4)

In contrast, American interviewees highlighted the role of social connections in enjoying work and improving future career prospects. US10, for instance, looked forward to interacting with fellow team members during manager-organized lunch meetings:

"We all just talk and it's a nice moment to have that's outside of work, I think. And it's just nice to see everyone's faces and catch up. And I think going back to like the quick conversation things, especially when we're working on something more long-term or bigger, having that is really beneficial." (US10)

US6's company offered numerous informal opportunities for cross-departmental networking, which he considered crucial for career development:

"For me, I want the next job that comes up for Senior Director to be like, 'Hey. We have this job opening. Oh man, he would be great for it. I remember talking to him, this is his background, and this is...' That's why it's important to me. It's more like career growth, helping peers, and just having that network to fall back on and leverage when and if you need it." (US6)

It was noteworthy that two-thirds of the American interviewees (n = 8) emphasized the importance of social connections, as compared to just a quarter of their Japanese counterparts (n = 3).

Moreover, such social connections facilitated establishment and understanding of social norms. For example, JP5 mentioned addressing behaviors she wanted to change through team discussions, while US12 initially had flexibility in office attendance but established norms through discussions due to concerns from her team's manager.

"I would say a lot of it started more implicit and became explicit because I think there were just more concerns about [...] how they deal with their remote work and how they deal with in-person, so over time I think it became more explicit. It was said. They gave more examples of what they're looking for. And then also, my personal team, I think those concerns are just reiterated. I think now it's become when we have a team meeting, it has to be in person." (US12)

It is also worth noting that understanding these social norms could be gained from observing one's surroundings or one-on-one communication. As JP2, a manager, explained: "I'm not really good at expressing things verbally, so I prefer to have people see what I'm doing. However, those who understand will get it, and those who don't, won't get it at all. For those who don't understand, I try to communicate directly during meetings, saying, 'Your approach might not be the best'." (JP2)

Similarly, US9 recounted that upon joining his company, employees were informed about communication expectations and what to anticipate from their surroundings through casual conversations with a project manager.

"He gave me a rundown on how most of the people are too, and what to kind of expect. So, it took a little bit of a workload off of me. Just because then there was less that I had to research within my company for myself. Sometimes I've been to a job site or something like that where someone would be like 'Watch out for this guy, he might say a couple of things that might offend you' or something like that and I kind of prepare myself before I have to interact with that person." (US9)

In summary, hybrid workers in Japan and the United States sought to establish trust in their surroundings through social connections to overcome the social norm of accountability in remote work. In the United States, social connections were emphasized more than in Japan, and we closely linked to personal benefits such as work enjoyment and enhanced career advancement possibilities. Moreover, these social connections have created opportunities to enhance the establishment and understanding of social norms. While direct observations of differences in the perceived strength of norms or the willingness to conform were not made, this explanation elucidates the underlying factors contributing to variations in the willingness to conform. It underscores establishing and understanding norms facilitated by social connections, driven by personal motivations, thereby providing insight into the context for differences in the willingness to conform.

4.2 Differences in the relationship between perceived social norms and well-being, and in navigating that relationship (RO2)

To answer RQ2, about whether variations exist between Japanese and American hybrid workers in terms of the relationship between perceived social norms and workplace well-being, we first conducted a moderation analysis using the online survey data. Table 4 presents the regression analysis results for predicting employee well-being.

Model 1 includes the age, gender, and job position covariates. Model 2 adds five variables related to perceived social norms and a dummy-coded country variable. Model 3 includes interaction terms between that country variable and each predictor variable and covariate.

In our best-fitting model, Model 3, it was found that in both Japan and the United States, there is a positive correlation between the willingness to conform to injunctive norms and overall well-being (b=0.24, SE=0.04, p<.001), as well as between the strength of descriptive norms and overall well-being (b=0.17, SE=0.04, p<.001). Furthermore, we observed a significant two-way interaction

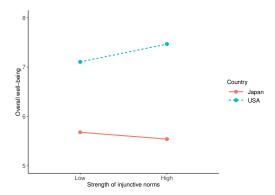


Figure 1: Interaction between country and strength of injunctive norms on overall well-being.

effect on overall well-being between the strength of injunctive norms and country (b=0.18, SE=0.05, p<.001). We then performed simple slope analyses on that model to further investigate the interaction. These analyses established that, for the American participants, the perceived strength of injunctive norms was positively associated with overall well-being (b=0.13, SE=0.03, p<.001). For their Japanese counterparts, however, the same relationship was non-significant (b=-0.05, SE=0.04, p=.23). Figure 1 plots the simple slopes of these interactions.

4.2.1 Embracing freedom leads to a work value mismatch. Further to our quantitative analysis in pursuit of the answer to RQ2, we analyzed the interview data. This qualitative analysis indicated that interviewees from both the target countries described hybrid work as enhancing their work-life balance, as compared to their prior experiences of working wholly in the office. JP1, for example, mentioned that spending less time commuting made him feel at ease both physically and mentally.

"In remote work, I can allocate my commuting time to work tasks, [... so] when I consider the time spent on going to and coming back from the office, the total time bound by work differs by around two hours a day. Therefore, I believe work-life balance becomes more fulfilling." (JP1)

Similarly, US9, a single father, expressed gratitude for the increased time flexibility, allowing him to spend more quality time with his children:

"The opportunity to spend more time with my kids. And to be able to pick them up without somebody hassling me. And then, the freedom to have dinner ready for them [...], being Mr. Mom essentially. When I have them, I have to cook, clean, do the laundry. So, it could be an opportunity to take care of all the day-to-day household items well, in between my calls and e-mails and stuff like that, so, that's definitely a huge benefit." (US9)

The benefits of such hybrid work arrangements might serve as a key factor in eliciting employee engagement and loyalty. While suspecting the productivity of colleagues when remote work, managers

Table 4: Model summaries of overall well-being with perceived social norms and the country as predictors.

	Model 1			1	Model 2	2	Model 3		
	Coef.	SE		Coef.	SE		Coef.	SE	
(Intercept)	6.01	0.07	***	5.45	0.06	***	5.40	0.07	***
Age	0.14	0.05	**	0.13	0.04	***	0.20	0.06	***
Gender									
Male (reference)									
Female	0.55	0.10	***	-0.11	0.08		0.17	0.16	
Role									
General employee (reference)									
Managerial employee	0.82	0.09	***	0.41	0.08	***	0.41	0.11	***
Operator, executive	1.45	0.15	***	0.49	0.13	***	0.80	0.22	***
Professional, research	1.17	0.17	***	0.28	0.14	*	0.10	0.38	
Others ^a	-0.01	0.21		0.38	0.18	*	0.44	0.19	*
Reference behavior				0.04	0.04		0.03	0.06	
Strength of INs				0.06	0.03	*	-0.05	0.04	
Willingness to conform to INs				0.26	0.03	***	0.24	0.04	***
Strength of DNs				0.16	0.03	***	0.17	0.04	***
Willingness to conform to DNs				0.06	0.03		0.06	0.05	
Country									
Japan (reference)									
United States				2.04	0.07	***	2.14	0.12	***
Age × Country							-0.10	0.08	
Gender									
Female × Country							-0.35	0.19	
Role									
Managerial employee × Country							-0.01	0.15	
Operator, executive × Country							-0.45	0.27	
Professional, research × Country							0.21	0.41	
Others ^a \times Country							-0.63	0.56	
Reference behavior \times Country							0.02	0.08	
Strength of INs × Country							0.18	0.05	***
Willingness to conform to INs × Country							0.05	0.06	
Strength of DNs × Country							-0.02	0.06	
Willingness to conform to DNs \times Country							-0.01	0.06	
R^2			0.09			0.41			0.42
AIC			8098			7243			7241

^{***:} p <.001; **: p <.01; *: p <.05; SE: standard error; IN: injunctive norm; DN: descriptive norm;

appeared to be compelled to respect the values of their employees to foster their engagement and loyalty. JP7 mentioned that his company has been exploring flexible working arrangements to enhance employee engagement. As a result, new initiatives have been introduced, such as a system allowing employees to work from anywhere, including hotels or their hometowns, for up to five days a month.

"Over the past three years, we have experimented with various initiatives with the goal of allowing diverse working styles and increasing employee engagement. As a result of these efforts, we have seen consistent positive outcomes, leading to the formalization and institutionalization of these practices." (JP7)

US6 has gained many benefits from hybrid work and expresses gratitude towards the company for respecting the values of its employees.

"It's like the golden handcuffs. Sort of loyalty... I don't know. I think I would say, yes, I would say overall, yes. They've done an amazing job at trying to keep people here. And work/life balance is a huge part of that." (US6)

It seems reasonable to suggest, based on our findings, that embracing unconstrained and adaptable work practices has transformed people's perceptions of work-related values. JP5, for example, mentioned that due to the COVID-19 pandemic, she had reevaluated the meaning of her work. Thereafter, instead of feeling fulfilled in her job, she developed a stronger desire for work with

a: Public official, faculty member, non-profit organization staff.

more freedom. Managers had also noticed these types of shifts in employees' attitudes toward their work styles. US11, for example, told us:

"A lot of the older leadership and executives, they want people back in the office, but they understand the new business world. And while they may be personally against it, they see that it is for the betterment of the company, and that's why they've left it up to the departments themselves to regulate it within themselves to see what works for them." (US11)

However, a mismatch in work values was often observed: for example, by generational gaps. JP2, a member of the 55-64 age bracket, told us:

"I was brought up with the belief that working on-site is fundamental. So even now, the idea of remote work, even once or twice a week, feels a bit unimaginable when I compare it to how I was raised. I still wonder if it's okay to be doing remote work to this extent." (JP2)

Conversely, US2, in the 18-24 age range, highlighted how the younger generation—having grown up with technology—can effectively accomplish tasks from home, and claimed that this has led to a misalignment between her personal goals and her superiors' objective of having everyone congregate in the office.

"We don't really need much support on those things. So if all I'm doing is kind of answering emails and creating certain documents, I also manage our social media as well. I can do all of that from my home and be able to be a bit more comfortable." (US2)

To avoid such value mismatches and maintain team cohesion, it seems effective for the team to adopt the same work style. Both Japanese and American interview participants mentioned that coming to the office with colleagues helped facilitate efficient face-to-face communication without the challenges of remote work communication. Furthermore, adopting the same work style within the team establishes a routine for employees, positively affecting productivity and well-being. JP8, for example, described the team's routine of working individually remotely on Fridays and reporting in detail in person with their supervisor every Monday.

"I feel like there's a great sense of rhythm in my life [...] Having remote work on Fridays fixed and decided makes me feel really good emotionally." (JP8)

Similarly, US1 adjusts his schedule to come to the office on the same days as his colleagues to enhance collaboration within the team. By adopting this routine, he has experienced its positive effects.

"The same structure of remote work is the biggest benefit you can have, otherwise if those folks aren't coming to the office at present or aren't coming on the same days that's not useful." (US1)

In summary, hybrid workers in Japan and the United States experienced increased work-life balance due to the autonomy and flexibility offered by hybrid work. These advantages can foster employee engagement and loyalty, so managers are willing to meet employee expectations to elicit their engagement and loyalty. Employees may also be motivated to meet management's expectations

to enjoy these benefits. Moreover, the freedom in work arrangements led to shifts in team members' work values, resulting in potential mismatches within the team's values. It appeared that team members adopting similar work patterns was effective in bridging these value mismatches and strengthening team cohesion.

4.2.2 Emotional perception of injunctive norms. Japanese and American interviewees reported recognizing injunctive norms and adjusting their behaviors accordingly. While their conformity to such norms generally did not involve the avoidance of explicit penalties, it is significant that there were notable cultural differences in how these hybrid workers emotionally perceived the injunctive norms. That is, in Japan, conforming to injunctive norms was often characterized as linked to the avoidance of others' negative evaluations, and strong injunctive norms were disliked as potentially undermining the flexibility of one's work style. JP9, for example, mentioned a custom of conforming to ho-ren-so with superiors, which often involves undertaking cumbersome tasks. Not doing so could result in reprimands from superiors, as well as raising other concerns:

"One reason I adhere to the custom is that I don't want to be reprimanded by my superiors. Also, since I hold a managerial position, if I don't adhere to it, I would get asked, 'Why did this happen? Why didn't you explain? Why didn't you communicate?' by my superiors. As a result, I feel stressed." (JP9)

JP8 felt that work styles aimed at boosting personal comfort should be allowed, as long as work goals are achieved:

"I dislike feeling tied down by the company or work. If I can produce solid results, I'd like to work in a way I determine is comfortable for me. So, I don't want to be constrained by rules." (JP8)

Similarly, JP3 mentioned feeling confined by clear injunctive norms, notably those that mandated coming to the office to work on tasks that could be done remotely:

"I can understand if there's a clear reason behind a rule. For example, if there's a specific requirement to come to the office on a certain day for in-person meetings, I can accept that. However, if there's just a rule like 'You need to come to the office at this frequency,' it might cause some stress or make me feel like, 'I could do this at home, so why do I have to be physically present?"' (TP3)

In the U.S., on the other hand, strong injunctive norms were considered necessary for team cohesion and work efficiency, and their absence created uncertainty about how to behave appropriately:

"You don't know what's right, what's wrong. You don't know if you're doing it. You don't know if you might screw something up [...]. I don't think anyone would feel comfortable not knowing what is expected of them. It's like going into a job and not having a job description, right?" (US8)

Likewise, US1 stated that it was clear what his team expected of him, and that the other members felt at ease as long as he was following those expectations.

"I mean ultimately [...] they have two big goals if I were to say so. First one, the primary one is get the work going, deliver on goals. That's the most important one. So they don't care if you miss out a day or two in a week, right? The second thing is [...] try to abide by company policies as much as possible. So again they are understanding." (US1)

Furthermore, US9 added that for injunctive norms to have a positive impact, it's also important that the company's atmosphere aligns with one's personal preferences.

"I felt like the last company I was like almost like holding a piece of myself back. And with this one I'm letting it all out there because I don't have to worry about my mails or offending somebody or something like that. It's very free I could say. But just the fact that I don't have to worry about that anymore. It's just the amount of stress that's off my shoulders is unbelievable because I don't have to worry all the time about getting fired." (US9)

Notably, most Japanese interviewees (n=7) preferred loose injunctive norms, whereas only a quarter of American interviewees (n=3) did so. Furthermore, most American interviewees (n=7) positively perceived injunctive norms, while only a quarter of Japanese interviewees (n=3) held the same view.

In summary, Japanese hybrid workers tended to view injunctive norms negatively, while American hybrid workers tended to perceive them positively. Specifically, Japanese hybrid workers often considered injunctive norms as potentially limiting their flexibility. In contrast, American hybrid workers believed that injunctive norms, especially when workplace values aligned with their personal preferences, were a foundation for feeling more comfortable in the workplace.

5 DISCUSSION

5.1 Differences in perceived social norms (RQ1)

First, based on two large-scale samples recruited from Japan and the United States, we examined whether there were differences in the perceived social norms and workplace well-being among hybrid workers in these countries. Our findings revealed significant differences between Japanese and American participants in their perceptions of social norms related to hybrid work and workplace well-being. Specifically, Japanese participants perceived both injunctive and descriptive norms to be less strong than Americans did, and reported a lower willingness to conform to both types of norms. The disparity in well-being levels is consistent with previous research suggesting that the Japanese have a lower average level of well-being than Americans [39, 66, 131]. On the other hand, while previous research has pointed out that the United States has weaker social norms than Japan [17, 57, 125], we observed that Americans perceived stronger social norms regarding when and where to work compared to Japanese individuals. Additionally, while Japan possesses a collectivistic cultural orientation emphasizing harmonious interpersonal relationships [126], our results indicate that Japanese individuals were less willing to conform to social norms

than Americans. Moreover, there were no significant differences between Japanese and American participants regarding the expected frequency of remote work. This suggests that while there are no significant differences in the reference behavior between Japan and the United States, there are differences in how these social norms are perceived. In the interviews, explicit explanations outlining the differences between Japan and the United States in the perceived strength of social norms and their willingness to conform were not evident. However, similarities and differences in the perception of social norms emerged as underlying factors for the difference in willingness to conform. Specifically, participants acknowledged the social norm of fulfilling accountability even in remote work settings, but variations were observed in the importance attributed to social connections as a means to navigate the accountability norm.

One explanation for the perception that the willingness to conform to social norms regarding when and where to work is higher in the United States compared to Japan lies in the difference in the importance of social connections. During the interviews, it was observed that Americans tend to place a higher emphasis on social connections compared to Japanese individuals. This is attributed to the fact that social connections align with personal needs, as they make work more enjoyable and contribute to career advancement. Furthermore, Americans actively sought pleasant social norms with colleagues through social connections. They also enhanced their understanding of social norms through communication and colleague observation. As a result, Americans may exhibit a higher willingness to conform to group norms because their individual goals align with the collective goals. On the other hand, while Japanese individuals also engage in activities like nominication (drinking communication) to strengthen bonds with colleagues by sharing work-related concerns and dissatisfactions, it appears that such social interactions have become challenging in the wake of COVID-19. While social interactions have also become challenging in the United States, Japanese employees may experience different effects on inter-person socialization due to the decreasing perceived importance of interpersonal relationships. According to a longitudinal survey conducted by the NHK Broadcasting Culture Research Institute every five years since 1973, there has been a long-term trend of a decreasing number of individuals desiring interactions such as consulting or mutual assistance in three types of relationships-workplace, relatives, and neighbors [71, p. 4]. Therefore, Japanese individuals who are not deeply committed to social connections may experience a decreased motivation to conform to social norms, as they have fewer opportunities to be aware of collective goals in a hybrid work environment.

Another possible explanation is that Americans might perceive and conform to social norms more strongly than the Japanese due to low employment protection in the United States. Based on the OECD indicator of the strictness of regulations of individual dismissals of regular workers (comprising procedural requirements, notice and severance pay, the regulatory framework for unfair dismissals, and enforcement of unfair dismissal regulation), the United States is categorized as a country with low employment protection [50]. During our interviews, some American participants described uncertainty about how to proceed with their work due to unclear social norms, exemplified by one participant who stated,

"It's like going into a job and not having a job description, right?" (US8). Additionally, others expressed concerns about potential termination if they failed to adhere to workplace norms. Furthermore, American participants associated social connections with career progression, so being mindful of social norms could have positive implications for building connections that help one secure a new job or get a promotion. Consequently, Americans may be at higher risk of losing their employment if they deviate from workplace norms and receive a poor assessment, and also may perceive opportunities for career advancement based on the social impressions of other people. In contrast, Japan is categorized as a country with moderate employment protection [50], characterized by features such as lifetime employment and seniority-based wages [49]. Thus, compared to Americans, Japanese individuals might not need to be as acutely aware of conforming to social norms to avoid dismissal and improve their career path.

5.2 Navigating the relationship between perceived social norms and well-being (RQ2)

Next, based on two large-scale samples recruited from Japan and the United States, we examined whether there were differences in the relationship between the perceived social norms and well-being among hybrid workers in these countries. This study provided initial evidence supporting the role of culture as a moderator in the relationship between perceived social norms for hybrid work and employee well-being. Among Japanese respondents, no significant association was found between the strength of injunctive norms and overall well-being. In contrast, among American respondents, the strength of injunctive norms was positively associated with overall well-being. Even after controlling for demographic variables and the interaction between country and demographic variables, the two-way interaction between the strength of injunctive norms and country remained significant, providing strong support for the moderation model. These findings suggest that while the strength of injunctive norms may benefit individuals' employee well-being in the United States, it does not necessarily lead to well-being benefits for individuals in Japan. Interestingly, normative beliefs have been shown to be more strongly related to well-being in collective cultures than in individualist cultures [118]. Therefore, it is intriguing that, even though Japanese individuals exhibit a correlation between group harmony and well-being [77] and Americans tend to emphasize individual goals [67, 68], it was in America that hybrid workers with a strong awareness of work pattern-related social norms tended to have higher workplace well-being.

One explanation for the positive relationship between the strength of injunctive norms and well-being among American participants is the association between social norms and trust. Prior research has indicated that trust is positively associated with well-being and that individualistic cultural tendencies at the national level further enhance this relationship [62]. In our interviews, Americans regarded social connections as a crucial means for building trust and actively engaged in establishing relationships. Such social connections were also linked to personal benefits, such as job enjoyment and career development. Furthermore, they comprehended social norms within these social ties and collectively sought comfortable standards. Especially when workplace values aligned with their

personal preferences, they perceived strong injunctive norms as particularly comfortable standards. Accordingly, Americans may build a comfortable work environment by potentially reinforcing team norms and trust through social connections motivated by fulfilling personal interests.

One explanation for the absence of such a positive relationship among Japanese participants could be linked to a negative valuation of norm violation. Previous research suggests that people who violate norms in collectivist cultures are more likely to be met with moral anger than those who violate norms in individualist cultures [116]. Consequently, members of collectivist cultures may view such norms more negatively. During the interviews, many Japanese participants preferred loose injunctive norms, as they disliked receiving explicit instructions regarding work arrangements. One participant articulated this sentiment, saying, "I dislike feeling tied down by the company or work" (JP8). Japanese individuals might perceive injunctive norms as negative constraints that must be adhered to, and they might be less inclined than Americans to focus on the benefits of strong injunctive norms. Additionally, negatively appraising deviations from these injunctive norms and demonstrating a lack of enthusiasm towards social connections could make Japanese individuals more inclined towards social isolation in hybrid settings.

5.3 Design implications

The findings of this study revealed two factors that were positively associated with well-being among Japanese and American participants: willingness to conform to injunctive norms and the strength of descriptive norms. According to the interview results, hybrid workers in Japan and the United States associate the benefits of hybrid work with increased engagement and loyalty. Both managers and employees expressed a willingness to meet each other's expectations to attain the advantages of hybrid work and increase employee engagement and loyalty. Additionally, they perceived aligning with colleagues' work styles to be advantageous, as it helped mitigate communication challenges associated with remote work by facilitating efficient face-to-face communication when in the office. Consequently, enjoying the benefits of hybrid work and enhancing the well-being of hybrid workers could involve fostering a desire to meet their team members' expectations of when and where to work and encouraging a more uniform frequency of office attendance for many employees to strengthen descriptive norms.

Recently, some companies have brought employees back to the office to facilitate communication and boost productivity in Japan and the United States [45, 100]. However, unilaterally instructing employees who have experienced remote work to revert to pre-COVID-19 work practices may potentially harm their morale and well-being. The insights gained from this study are significant in revealing the considerations employers should bear to maintain employees' morale and well-being. The following outlines specific design implications.

As a design approach to cater to team members' expectations, the Pygmalion effect [109] could be explored. The Pygmalion effect refers to "the effects of interpersonal expectations, that is, the finding that what one person expects of another can come to serve as a self-fulfilling prophecy" [108]. In the HCI fields, insights from

the Pygmalion effect have been utilized to employ a strategy in Programming by Example (PBE) systems where menus and objects on the screen are highlighted, indicating to the user what is expected to be their next action [28, 91, 99]. Our interviews also highlighted instances where participants found it challenging to meet the expectations of those around them when expectations were unclear. Conveying the expectations of the surrounding environment-for example, by highlighting days where attendance is expected on the user interface of a schedule—could potentially motivate team members to attend on those days. Furthermore, the interviews suggested that enjoying the benefits of hybrid work may foster engagement and loyalty towards the team, as one participant expressed, "It's like the golden handcuffs" (US6). Considering this, it might be necessary not only to communicate expectations regarding work arrangements but also to ensure the autonomy and flexibility advantages of hybrid work by aligning one's work practices with those expectations.

However, even though clearly setting normative expectations might enhance well-being in the United States, caution may be needed in Japan, where the relationship between injunctive norm strength and well-being was more troubled. Our interviews suggested that Japanese hybrid workers focused on negative aspects of strong injunctive norms, such as fearing a reduction in the flexibility of their work style if they follow norms, and criticism and judgment if they do not conform to these norms. This is similar to prior research, which indicated that Japanese people's motivations for following social norms related to pandemic safety were strongly shaped by fears about other people's negative judgement [73]. Thus, in countries like Japan, as discussed by Akahori et al. [3], it might be necessary to consider measures that respond to surrounding expectations in a non-intrusive manner, avoiding excessive burden on employees and increased stress. To achieve these, promoting an assertive communication style is crucial, allowing employees to express their preferred working styles freely and fostering a collaborative environment that values diverse preferences. Executives and managers can enhance understanding by organizing workshops and conducting anonymous surveys to respect and align with employees' values and work preferences. Furthermore, it may be worthwhile to explore methods to shift their focus towards the positive aspects of such norms to mitigate the negative thoughts they tend to harbor towards injunctive norms. Previous research suggests that adopting a positive perspective like empathy in interactions with colleagues enhances employee well-being, rather than perceiving them through a negative lens like envy [54, 105]. Considering this, for example, reminding hybrid workers about the positive view that injunctive norms can foster team cohesion and make their own work easier might be effective. Specifically, by having managers explain the positive aspects of injunctive norms and providing opportunities to request cooperation from the team, employees might be able to perceive injunctive norms in a positive light. However, if management and employees lack trust, it might be challenging for employees to view these norms positively. Therefore, it is crucial for management to maintain transparency and open communication regarding injunctive norms, actively collect feedback from employees on these norms, and demonstrate a willingness to incorporate relevant feedback to foster a more positive perception.

Further, workplace technologies could incorporate the concept of social proof [23, 35, 114] to increase the strength of descriptive norms and equalize team members' office attendance frequencies. Social proof refers to the phenomenon where choices favored by the majority prompt others to make similar choices. In the field of HCI, social proof has been applied in a range of scenarios, such as manipulating response biases [69, 129] and promoting appropriate security behaviors [29] and social behaviors in online communities [113]. In the context of hybrid work, we suggest that social proof could be achieved by, for example, highlighting days in a calendar when many individuals plan to come to the office. This could help hybrid workers form accurate and clear understandings of descriptive norms, potentially motivating them to come to the office on matching days and with similar frequency. This may be particularly effective in collectivist cultural contexts, where individuals are particularly likely to adopt behaviors that align with

Supporting social proof has the potential not only to reinforce descriptive norms but also to achieve some secondary effects. The first is the routinization of work. In our interviews, some participants discovered that aligning their office days with their colleagues to strengthen teamwork helped create a work routine. One participant expressed this by saying, "I feel like there's a great sense of rhythm in my life" (JP8). This, in turn, positively impacted their productivity and overall well-being. Previous research has highlighted that meaning-making routines, i.e., rituals, contribute to the construction of shared identity [47] and positively impact employee well-being [93]. The second is the strengthening of trust in relationships. In our interviews, it was suggested that in-person meetings contribute to building trust with colleagues. Thus, supporting the alignment of in-person attendance days among team members may lead to higher colleague trust. In addition, prior research has suggested that interpersonal trust enhances well-being [7]. Last, accurate social proof may help avoid pluralistic ignorance [78] the phenomenon where people incorrectly think that their own beliefs are different from those around them. In our interviews, it was suggested that social norms are understood through social communication and observation. Remote work makes it difficult to form and update accurate understandings of others [137], and so some hybrid workers may be at risk of believing they should follow unrealistic and inaccurate norms. In the context of social media, for example, prior research has found that well-being is harmed by social comparison to unrealistic standards [13, 32], and that this can be improved by providing more realistic information [123]. We suggest that accurate social proof may help hybrid workers maintain realistic standards and thus avoid unnecessary pressure from a misguided perception of injunctive norms.

5.4 Limitations and future directions

One primary limitation of our study is that we have exclusively chosen Japan to represent a tight and collectivistic culture and the United States to represent a loose and individualistic culture. Previous research has reported variations in cultural tendencies in other regions, such as Africa and Western Europe, East Asia, and North America [57, 67, 68]. Furthermore, some studies have reported results contradicting the common belief that Japan is collectivistic

and the United States is individualistic. For example, according to Yamagishi's experimental results, in conditions without punishment for non-cooperation, Japanese tend to exhibit lower levels of cooperation compared to Americans [136] and are more prone to exit the group [135]. Therefore, there is a need to investigate cultural differences in a broader range of regions and countries to gain a more comprehensive understanding while taking into account the specific cultural characteristics of each individual nation, as well as the diverse cultural dimensions.

A second limitation is the influence of a variety of response biases. Prior research has shown that the Japanese avoid extreme responses and prefer neutral ones [20, 86, 117]. However, Diener et al. [39] examined a sample of Chinese, Japanese, Korean, and American respondents and concluded that the responses regarding the subjective well-being of Asian respondents are unlikely to shift towards neutrality. Moreover, collectivist cultures exhibit a high acquiescent response [74], inconsistent with a tendency for lower responses in our survey. Additionally, there is a possibility of social desirability bias, defined as "the tendency of research subjects to choose responses they believe are more socially desirable or acceptable rather than choosing responses that are reflective of their true thoughts or feelings" [61]. Diener et al. [38] found that East Asian individuals showed lower desirability for life satisfaction, indicating a negative bias. Such biases might reflect cultural phenomena, making it challenging to determine whether they should be eliminated. In the future, it is necessary to investigate the potential biases that might be present in the perceived social norms and the relationship between perceived social norms and well-being.

The third limitation stems from skewed attributes among Japanese and American hybrid workers. A Japanese survey (2021) of 35,990 employed individuals aged 15 and above found a higher percentage of males (33.8%) remote work compared to females (19.1%) [95]. Among males, the age distribution was balanced, while among females, there was a tendency for the proportion of remote workers to decrease as age increased [95]. Similarly, a 2022 McKinsey & Company survey of 25,000 Americans revealed a higher percentage of males (61%) remote work compared to females (52%), skewed toward younger age groups [43]. In our survey, the Japanese sample is mostly male (88.0%) and concentrated in the 45-54 years (36.5%) and 55-64 years (42.5%) age groups. In contrast, the American sample has slightly less gender bias, with males at 62.2% and females at 37.8%, but is skewed toward the 25-34 years (29.4%) and 35-44 years (41.6%) age groups. This gender and age bias in our sample might be due to the survey company's respondent distribution. Since our regression model controls for age and gender, the impact is expected to be minimal. However, for future research, it is advisable to employ stratified sampling to eliminate such biases and ensure the generalizability of the study findings.

The fourth limitation is that, due to the cross-sectional nature of this study, it cannot identify the causal relationship between social norms and well-being. Previous research revealed that during the transitional period to hybrid work when social norms are not sufficiently established, employees faced challenges in decision-making about when and where to work, necessitating responses to these choices' difficult and ambiguous aspects [3]. Moreover, social norms may dynamically change, and variations in social norms could potentially impact employee well-being. In fact, during our interviews,

some participants noted changes in social norms through discussions with colleagues, as exemplified by statements like "I would say a lot of it started more implicit and became explicit" (US12). Moving forward, longitudinal research is essential to elucidate how social norms evolve, the extent to which individual employees actively engage in these changes, and the implications of such changes and involvement on employee well-being.

6 CONCLUSION

In this work, we conducted an online survey and interview study with Japanese and American hybrid workers to investigate crosscultural differences in the perceived social norms of hybrid work and the relationship between social norm perception and workplace well-being. The results revealed disparities between Japanese and American hybrid workers' understanding of social norms as well as the relationship between social norm perception and workplace well-being. American participants perceived strong norms and expressed a higher willingness to conform to norms, when compared to Japanese participants. Further, Americans demonstrated a positive correlation between injunctive norm strength and wellbeing, whereas there was no evidence of a significant relationship between injunctive norm strength and well-being among Japanese. Additionally, the interview study suggested that Americans view injunctive norms as a foundation for increasing their comfort at work, whereas Japanese individuals may perceive injunctive norms as burdensome obligations. Given these results, it is evident that the design of collaboration tools aimed at boosting hybrid workers' well-being needs to be specifically tailored to each country's culture.

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