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Cross-cultural comparison of mental health between Japanese and Dutch workers: Relationships with mental health shame, self-compassion, work engagement and motivation

Abstract

Purpose: The primary purpose of this descriptive study was to compare the levels of, and relationships among mental health problems, mental health shame, self-compassion, work engagement, and work motivation between workers in Japan (collectivistic and success-driven culture) and the Netherlands (individualistic and quality-oriented culture).

Design/methodology/approach: A cross-sectional design, where convenience samples of 165 Japanese and 160 Dutch workers completed self-report measures about mental health problems, shame, self-compassion, engagement and motivation, was used. Welch t-tests, correlation and regression analyses were conducted to compare i) the levels of these variables, ii) relationships among these variables, and iii) predictors of mental health problems, between the two groups.

Findings: Dutch workers had higher levels of mental health problems, work engagement and intrinsic motivation, and lower levels of shame and amotivation than Japanese workers. Mental health problems were associated with shame in both samples. Mental health problems were negatively predicted by self-compassion in Japanese, and by work engagement in Dutch employees.

Originality/value: The novelty of this study relates to exploring differences in work mental health between those two culturally contrasting countries. Our findings highlight potential cultural differences such as survey responding (Japanese acquiescent responding vs Dutch self-enhancement) and cultural emphases (Japanese shame vs Dutch quality of life). Job crafting, mindfulness and enhancing ikigai (meaningfulness in life) may be helpful to protect mental health in these workers, relating to self-compassion and work engagement. Findings from this study would be particularly useful to employers, managers, and staff in human resources who work with cross-cultural workforce.

Keywords: cross-culture, Japanese workers, Dutch workers, work mental health, self-compassion, work engagement

Research paper

Introduction

Work Mental Health as A Global Issue

Whilst it is still being debated, mental health is generally regarded as a dynamic state of internal equilibrium, relating to the ability to cope with life's difficulties to function in social roles (Galderisi et al. 2015). Mental health problems commonly refer to psychological distress such as depression, anxiety, and stress (European Community, 2005). About 13% of the world population (971 million people) suffer from some type of mental health problem (James et al., 2018). High mental well-being is associated with better work performance and achievement, while mental distress is associated with poorer performance and achievement (Royal College of Psychiatrists, 2011). Maintaining good mental health and well-being is an important global issue today, further underscored by the fact that it is targeted in the United Nations' 17 sustainable development goals ('Goal 3: Good health and well-being'; 2015).

One of the areas that particularly requires attention is work mental health: mental health in the workplace has been placed high on the national agenda in many developed countries (Kestel, 2019). These countries include Japan and the Netherlands – two culturally contrasting countries: collectivistic and success-driven Japan, and individualistic and quality-oriented Netherlands[1] (Hofstede, Hofstede & Minkov, 2010). In Japan, 60% of the employees experience intense anxiety and stress (Ministry of Health, Labour and Welfare [MHLW], 2010), and the number of Japanese workers' compensation claims for mental health problems has been increasing (200 in 2000 to 1,800 in 2018; MHLW, 2019a). In response, the government passed a new policy that aims to prevent *karoshi* ("過労死" = death from overwork), *karo-jisatsu* ("過労自殺" = suicide from overwork) and other overwork-related health disorders in 2014 (MHLW, 2014). To facilitate its implementation, the government

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[1] Originally Hofstede termed 'masculinity-femininity' to describe this dimension from data collected in the International Business Machines Corporation (IBM) during the 1970s, however it can be misleading to use this terminology today (Minkov, 2018), and was therefore changed to 'success-driven' and 'quality-oriented'.

budget for preventive strategies against overwork-related disorders increased by 161% (5.5 billion JPY in 2015 to 14.4 in 2018) (MHLW, 2019b). In addition, the Japanese government has initiated the work-style reform to help reduce overtime working, which in turn is aimed to help maintain the Japanese workforce (The Prime Minister of Japan and His Cabinet, 2016). Despite these attempts, notable effects have not been reported; a recent report noted that the number of suicides because of work still has increased in recent years (1978 suicides in 2016, 1991 suicides in 2017, and 2018 suicides in 2018; MHLW, 2019c) along with the ratio of work-related suicides to overall suicides (9.0% in 2016, 9.3% in 2017, and 9.7% in 2018; MHLW, 2019). Unsurprisingly, 40% of Japanese companies have still not engaged with the work-style reform because many of these companies are not convinced that the reform would improve their workplace mental health (Teikoku Databank, 2020).

Similarly, the Dutch workforce also suffers from mental health problems. The total costs of work-related sickness absence are about 7 billion EUR, of which mental health-related absence accounts for 3 billion EUR annually (Douwes et al., 2014). The rate of Dutch workers who take absence due to poor mental health is 40% higher than other OECD (Organization for Economic Cooperation and Development) countries (OECD, 2014). In order to address the Dutch workers' mental health difficulties, the government is decentralising their responsibilities for mental health support to employers, municipalities, and people: by supporting mental health issues locally and individually, their mental health support can be more holistic, integrated and tailored (OECD, 2014). In the Dutch social benefit system, employers are responsible for making an action plan for an absent worker to return to work (Houtman, 2015). In 2012, the Dutch Association of Mental Health and Addiction Care made an agreement with the Social Security Institute to augment collaboration on support for people with mental health problems returning to work, by encouraging knowledge sharing about social security regulations and mental health support

(Houtman, 2015). The Participation Act (Participatiewet) was enacted in 2015 to help workers to return to work: anyone with health problems who wants to and can work but needs support, is supported. However, a recent evaluation by the Netherlands Institute for Social Research concluded that the Participation Act was not successful five years after implementation (Van Echtelt et al., 2019).

Moreover, diverse negative consequences derived from poor mental health are also alarming. Poor mental health hinders our coping, and affects thoughts, feelings, and behaviours negatively (WHO, 2019). Mental health problems are related to lower work performance (Asami, Goren, & Okumura, 2015), and reduced work activities (Gilmour & Patten, 2007). For instance, depression is negatively associated with work productivity, and can cause disability, absenteeism, and premature early retirement (Blackmore et al., 2007). A workplace, where many members of staff have mental health problems, is associated with a stronger intention to leave, leading to a high turnover (International Labour Organization, 2010), which can cost the company greatly (Villanueva & Djurkovic, 2009).

Despite poor mental health being a global issue and the negative consequences of poor mental health, cross-cultural comparisons of mental health and its relevant constructs have been scarce. Comparing two countries such as Japan and the Netherlands would be meaningful; though both countries are economically developed (International Monetary Fund, 2019), they are on the opposite extremes in many aspects, one of which is working hours; Japanese workers are one of the longest working workforces in the world, while Dutch counterparts are one of the shortest (OECD, 2007; Snir & Harpaz, 2009). Further, culturally, these countries are located on the opposite to each other, in particular Japanese success-driven culture (the society tends to value ambitions and successes) vs Dutch quality-oriented culture (the society tends to value the quality of life), and Japanese collectivism vs Dutch individualism (Hofstede, Hofstede & Minkov, 2010). These different cultural values may

have different implications for mental health (e.g., workers in a collectivistic culture tend to experience stress and shame relating to their colleagues, while workers in an individualistic culture tend to experience distress by violating their personal standards; Kotera, Adhikari & Van Gordon, 2018a). Accordingly, this study aimed to compare the levels of, and relationships among mental health and its relevant constructs between those two countries.

Mental Health Shame

Shame about having a mental health problem (i.e., mental health shame) can exacerbate workers' mental health problems. Mental health shame was positively associated with, and was a significant positive predictor of mental health problems in UK and Japanese workers (Kotera, Adhikari & Van Gordon, 2018a; Kotera, Asano, Gilbert, Ishimura & Sheffield, 2018; Kotera, Green & Sheffield, 2019; Kotera, Adhikari & Sheffield, 2020). Workers who felt ashamed about having mental health problems tended to have high levels of mental health problems. Finding these associations was useful, because workers reporting high mental health shame would not engage in mental health training as much as workers reporting low mental health shame, and alternative solutions could be suggested to improve their mental health such as self-compassion training (Kotera, Green & Sheffield, 2019). Similar to Japanese workers, Dutch workers also experience their colleagues' negative attitudes towards mental health problems, hindering their help-seeking (van Hoffen et al., 2015). However, research into the relationship between mental health problems and mental health shame in the Dutch workforce ,and comparison with Japanese workforce have been thin. Considering a shame culture of Japan (Inoue, 2007) and their tendency to underestimate mental distress (Nakamura-Taira, Izawa & Yamada, 2018), we would expect Japanese workers to have higher shame scores, and stronger relationships between shame and mental health problems, than Dutch workers.

Self-Compassion, Work Engagement, and Work Motivation

In addition to mental health shame, self-compassion, work engagement and work motivation were explored as they have previously been associated with mental health.

Compassion studies reported that self-compassion is related to better mental health (Kotera, Adhikari & Sheffield, 2020; Kotera, Green & Sheffield, 2019), while compassion for others is not (Lopez, Sanderman, Ranchor & Schroevers, 2018). Self-compassion is a form of compassion that is directed towards oneself, encompassing being kind to oneself during difficult times, committing to soothe one's suffering (Neff, 2003). Several recent studies have noted that strong self-compassion may reduce the risk of mental health problems (Ehret, Joormann, & Berking, 2015; Hofmann, Sawyer, Fang, & Asnaani, 2012; MacBeth & Gumley, 2012; Muris, Meesters, Pierik, & de Kock, 2016). In addition, counselling interventions centred around compassion improved mental health and reduced shame (Braehler et al., 2013; Gilbert & Procter, 2006; Kelly, Zuroff, & Shapira, 2009). Though the importance of self-compassion for mental health has been reported in both Japanese (Arimitsu, 2016) and Dutch individuals (Lopez et al., 2018), comparison between workers in these countries has not been thoroughly explored to date. Given that self-compassion might differ cross-culturally (Montero-Marin et al., 2018), it is worthwhile to compare self-compassion between those two culturally contrasting countries.

Work engagement also seems to be closely related to workers' mental health. Work engagement refers to a positive emotional and cognitive state of mind, portrayed by vigour, dedication, and absorption (Schaufeli, Salanova, González-Romá, & Bakker, 2002). Poor work engagement is detrimental to the economy: for example, the cost of poor work engagement is estimated to be about $370 billion a year, equivalent to 2% of GDP in America ($16 trillion; Gallup, 2013). Unsurprisingly, higher work engagement was related with higher productivity and better mental health (Gorgievski & Bakker, 2011). However, research is lacking on whether work engagement is related to mental health differently across

cultures. Levels of work engagement between Japan and the Netherlands were compared in multiple comparisons; Shimazu, Schaufeli, Miyanaka and Iwata (2010) reported that Japanese workers had lower engagement than Dutch workers. However, as Shimazu et al., noted (2010), multiple comparisons can suffer from cultural differences in responding to surveys (i.e., self-enhancement might have been present in Dutch participants, while Japanese participants might have suppressed positive emotion). Therefore this study examined and compared the relationships between work engagement and mental health in those two countries (i.e., how these constructs are related to each other, instead of their mean score comparison).

Lastly, reasons why workers engage with work (i.e., work motivation) is another construct that is related to workplace mental health. Work motivation refers to the psychological elements that help workers to be engaged in work-related activities (Pinder, 1998). Work motivation has been explored thoroughly in the field of industrial psychology, as a workforce with high work motivation is essential to organisational success (Kanfer, Chen, & Pritchard, 2008). Likewise, low levels of work motivation are disadvantageous to organisations, for example in the UK, costing £6 billion in total to the economy annually (Centre for Economics and Business Research, 2013). Work motivation was related to mental health problems and mental health shame in UK workers (Kotera et al., 2018) and UK business students (Kotera, Conway & Van Gordon, 2019). Extrinsic motivation (a drive for external rewards such as money and fame) was more strongly associated with mental health problems and mental health shame than intrinsic motivation (inherent pleasure in doing what one loves; Kotera et al., 2018; 2019).

Self-Determination Theory (SDT) is one of the most established theories about work motivation, claiming that human beings inherently aspire to integrate their mental energy into a unique identity (Deci & Ryan, 1985). SDT categorises work motivation into extrinsic

motivation and intrinsic motivation, along with amotivation (no motivation at all). Extrinsic motivation occurs when a worker engages in work, aiming to gain external rewards such as money and status, whereas intrinsic motivation occurs when a worker engages in work for inherent joy and satisfaction.

Extrinsic motivation and amotivation are associated with negative outcomes (Vallerand & Ratelle, 2002): emotional exhaustion (Houkes, Jassen, de Jonge, & Bakker, 2003), depression (Blais, Lachance, Vallerand, Brière, & Riddle, 1992), intention to leave the organisation (Quast & Kleinbeck, 1990), poor goal achievement (Lemos & Veríssimo, 2014), susceptibility to persuasion (Koestner & Losier, 2002), and limited performance due to reduced concentration and memory (Vallerand, 1997). On the other hand, intrinsic motivation is related to positive outcomes (Deci & Flaste, 1996), including active learning (Koestner & Losier, 2002), achievement (Sheldon & Elliot, 1999), performance (Baard, Deci, & Ryan, 2004; Miller, 2002), prosocial behaviour (Gagne, 2003), well-being (Ilardi, Leone, Kasser, & Ryan, 1993), job satisfaction (i.e., increased autonomy and job security, and better work atmosphere; Deci, Connell, & Ryan, 1989; Locke & Latham, 2004; Zuckerman, Porac, Lathin, & Deci, 1978), and receiving better supervisory support (Pelletier & Vallerand, 1996). Intrinsic motivation can be strengthened by an organisational culture that encourages autonomy (Gagne & Deci, 2005), satisfying the three psychological needs of competence, autonomy, and relatedness (Ryan & Deci, 2000). Relative to extrinsic motivation, intrinsic motivation is three times more strongly related to work engagement (Cho & Perry, 2012). To date, there has been little research on cross-cultural comparison of work motivation (e.g., UK-Chinese hospitality workers; Kotera, Adhikari & Van Gordon, 2018a; comparison within the same organisations; Zhao & Pan, 2017). Considering the success-driven nature of Japanese culture, and quality-oriented Dutch culture, Japanese workers would score higher extrinsic motivation and lower intrinsic motivation than Dutch workers.

Study Aims

Accordingly, three aims were established in this descriptive study. First, we compared the levels of mental health problems, mental health shame, self-compassion, work engagement, and work motivation (i.e., intrinsic motivation, extrinsic motivation and amotivation) between Japanese workers and Dutch workers (Aim 1). Secondly, we compared correlations among these variables between those workers (how differently these variables are related to one another between Japanese workers and Dutch workers) (Aim 2). Lastly, we compared predictors of mental health problems between them (Aim 3).

Methods

Participants

Both Japanese and Dutch workers were recruited through researchers' networks, using online surveys. To avoid possible biases, participants were recruited during the same period, using the same online survey platform that is adaptable to both Japanese and Dutch languages. A total of 201 Japanese workers agreed to take part, of which 165 (125 males, 40 females; Age $M = 47.20$, $SD = 11.85$, range 20-73 years old; 155 full-time workers and 10 part-time workers) completed assessment measures. One hundred and sixty Dutch workers (62 males, 98 females; Age $M = 42.41$, $SD = 13.06$, range 20-66 years old; 82 full-time workers and 78 part-time workers) of 228 agreed to participate completed the same measures. Although no queries were received from the participants, possible reasons for incomplete responses included that participants felt the survey was too long or the survey link stopped working. No compensation was offered for participation. Compared to the general working population, our Japanese sample had more males (33 million male workers, and 26 million female workers in Japan; National Statistics Center, 2015), however a similar mean age (43 years old; MHLW, 2019d), and our Dutch sample had more female workers with a similar

mean age (53% male workers, Age $M = 41$ years old; Centraal Bureau voor de Statistiek, 2019). For Japanese workers, the Japanese version of the scales were used, and for Dutch workers, the Dutch version of the scales were used. Because translated versions were not available, the mental health shame scale and work motivation scale were translated and back-translated prior to a discussion to ensure the original meaning was captured among two bilingual psychology researchers for each language. To be included in the study, participants needed to be aged 18 years or older and work for at least three days a week at one organisation.

In the Japanese sample, 7.3% of employees worked in education and construction respectively (n=12), 6.7% worked in retail, and communication and technologies respectively (n=11), 4.9% worked in wholesale and transit respectively (n=8), the remaining worked in industries including finance, manufacturing, hospitality and caring. The majority of Japanese workers (66%) had a higher education degree as their highest degree (n=110), 17% had a further education degree (n=28), 15% had a high school diploma, and 1% had a middle school diploma (n=2).

In the Dutch sample, 19% worked in education (n=30), 11% worked in broadcasting (n=18), 10% worked in the government and caring respectively (n=16), 8% worked in retail (n=13), 6% worked in communication and technologies (n=10), 5% worked in finance (n=8), and the remaining worked in industries such as hospitality, transit, construction. The majority of them (68%, n=109) had a further education degree as their highest degree, 24% had a higher education degree (n=38), and 8% had a high school diploma (n=13).

Procedure

Ethical approval was granted by the <UNIVERSITY BLINDED> research ethics committee (reference number 2019-WOP-10266). After consenting to participate, participants were sent a link to the assessment scales (see below). After screening for outliers

and distribution, scores for mental health problems, mental health shame, self-compassion, work engagement, and work motivation in the Japanese workers and the Dutch workers were compared (Aim 1). Correlation analyses were then performed in each sample, to compare correlations among these variables between Japanese workers and Dutch workers (Aim 2). Finally, multiple regression analyses were conducted to identify significant predictors for mental health problems in each sample (Aim 3). All analyses were conducted using IBM SPSS version 26.0.

Measurement Instruments

Mental health problems were measured using the Depression Anxiety and Stress Scale 21 (DASS-21), consisting of 21 items, a shortened version of the DASS-42 (Lovibond & Lovibond, 1995). Items are categorised into three subscales of common mental health problems: depression (e.g. 'I couldn't seem to experience any positive feeling at all'), anxiety (e.g. 'I was aware of dryness of my mouth'), and stress (e.g. 'I found it hard to wind down'), and answered on a four-point Likert scale (0 = 'Did not apply to me at all' to 3 = 'Applied to me very much, or most of the time'). DASS-21 has good reliability (α = .87-.94; Antony et al., 1998). For the purpose of this study, the total score was used to assess the level of mental health problems (Lovibond & Lovibond, 1995).

Mental health shame was measured using the Attitudes Towards Mental Health Problems (ATMHP), comprising 35 items considering i) negative attitudes, ii) external shame, iii) internal shame, and iv) reflected shame (Gilbert et al., 2007). Negative attitudes (i) refer to the worker's perception of how their community and family perceive mental health problems (e.g., 'My community/family sees mental health problems as a personal weakness'). External shame (ii) is related to the worker's perception of how their community and family would view them if they had a mental health problem (e.g., 'I think my community would see me as inferior'). Internal shame (iii) examines the worker's perception

of how they would perceive themselves if they had a mental health problem (e.g., 'I would see myself as inadequate'). Reflected shame (iv) corresponds to how the worker believes their family would be perceived if the worker had a mental health problem (e.g., 'I would worry that I would be letting my family's honour down') and how the worker believes they would feel if a close relative had a mental health problem (e.g., 'I would worry that my own reputation and honour might be harmed'). Each item is scored on a four-point Likert scale (0 = 'Do not agree at all' to 3 = 'Completely agree'). All of the subscales have good reliability (α = .85–.97; Gilbert et al., 2007). Those four subscales were summed to indicate mental health shame (Gilbert et al., 2007).

Self-compassion was measured using the Self-Compassion Scale-Short Form (SCS-SF; Raes, Pommier, Neff, & Van Gucht, 2011), a 12-item measure, shortened version of the 26-item Self-Compassion Scale (Neff, 2003). SCS-SF evaluates how kind the worker can be towards themselves in challenging times (Neff, 2003). Items (e.g., 'I try to be understanding and patient towards those aspects of my personality I don't like') are responded on a five-point Likert-scale ('1' = 'Almost never' to '5' = 'Almost always'). SCS-SF has good reliability ($\alpha \geq 0.86$; Raes et al., 2011).

Utrecht Work Engagement Scale-9 (UWES-9; Schaufeli, Bakker & Salanova, 2006), a shortened version of the original UWES-17, comprising nine items to assess their level of *work engagement*. Nine items are categorised into three subscales: vigour (e.g., 'At my work, I feel bursting with energy'), dedication (e.g., 'I am enthusiastic about my job'), and absorption (e.g., 'I feel happy when I am working intensely'). Each item is responded on a seven-point Likert-scale ('0' = 'Never' to '6' = 'Always (every day)'). For the purpose of this study, the total score of the UWES-9 was used (α = .85-.92; Schaufeli et al., 2006).

Lastly, *work motivation* was assessed using the Work Extrinsic and Intrinsic Motivation Scale (WEIMS), an 18-item measure for work motivation (i.e., extrinsic

motivation, intrinsic motivation and amotivation) based on the Self-Determination Theory (SDT; Tremblay, Blanchard, Taylor, Pelletier & Villeneuve, 2009). WEIMS comprises six subscales (from the lowest autonomy to the highest): i) amotivation (e.g., 'I ask myself this question, I don't seem to be able to manage the important tasks related to this work'), ii) external regulation (e.g., 'For the income it provides me'), iii) introjected regulation (e.g., 'Because I want to succeed at this job, if not I would be very ashamed of myself'), iv) identified regulation (e.g., 'Because this is the type of work I chose to do to attain a certain lifestyle'), v) integrated regulation (e.g., 'Because it has become a fundamental part of who I am'), and vi) intrinsic motivation (e.g., 'Because I derive much pleasure from learning new things'). Each item is scored on a seven-point Likert-scale ('1' = 'Does not correspond at all' to '7' = 'Corresponds exactly'). All of the subscales have adequate to good reliability (α = .64-.83; Tremblay et al., 2009). For the purpose of this study, the four extrinsic motivation subscales (from external regulation (ii) to integrated regulation (v)) were averaged to present 'extrinsic motivation' (Kotera, Adhikari & Van Gordon, 2018b; Tremblay et al., 2009).

Results

No outliers were identified in both Japanese and Dutch samples using the outlier labelling rule (Hoaglin & Iglewicz, 1987). Cronbach's alpha for all the subscales were .70 or above, demonstrating high internal consistency. Table 1 summarised the descriptive statistics.

[Please insert Table 1 about here]

Comparing the Levels of Work Mental Health (Aim 1)

Because all variables, except for work engagement and extrinsic motivation in the Japanese sample, and extrinsic motivation in the Dutch sample, were not normally distributed (Shapiro-Wilk's test, $p < .05$), all data were square-root-transformed to satisfy the assumption

of normality. The assumption of homogeneity of variances was violated (Levene's test for equality of variances, $p < .05$), therefore the Welch t-tests were conducted. Japanese workers had lower levels of mental health problems ($t = -9.34$), work engagement ($t = -9.52$) and intrinsic motivation ($t = -8.63$), and higher levels of mental health shame ($t = 5.51$) and amotivation ($t = 3.39$) than Dutch workers ($p < .001$ for all these variables). There were no significant differences in self-compassion ($t = .09$, $p = .09$) and extrinsic motivation ($t = 1.96$, $p = .051$) between the two groups.

Comparing Correlations (Aim 2)

Pearson correlations were used to examine the relationships of mental health problems, mental health shame, self-compassion, work engagement, and work motivation in Japanese and Dutch workers (Table 2). For gender, point biserial correlations were calculated (1 = male, 2 = female).

[Please insert Table 2 about here]

Our correlation analyses revealed that mental health problems were positively associated with mental health shame and amotivation, and were negatively associated with work engagement and intrinsic motivation in both of the samples. Likewise, work engagement and intrinsic motivation were related to all psychological variables in both workforces, apart from work engagement-mental health shame in Japanese workers. However, differences between Dutch and Japanese workers were that i) self-compassion was only related to work engagement, intrinsic and extrinsic motivation in Dutch workers, it was related to almost all psychological variables, except for extrinsic motivation, in Japanese workers, and ii) age was negatively related with mental health problems in Japanese workers.

Comparing Predictors of Mental Health Problems (Aim 3)

Multiple regression analyses were performed to identify relative contribution of each variable to mental health problems. First, gender and age were entered to statistically adjust for their effects on mental health constructs (Bramness, Walby, Hjellvik, Selmer, & Tverdal, 2010; Currin, Hayslip, & Temple, 2011; Van Droogenbroeck, Spruyt, & Keppens, 2018). Second, scores of mental health shame, self-compassion, work engagement, and work motivation were entered. Adjusted coefficient of determination (Adj. R_2) was reported. Multicollinearity was not a concern (VIF < 10).

[Please insert Table 3 about here]

In both samples, mental health shame, self-compassion, work engagement and work motivation predicted medium size of variance in mental health problems: 44% in Japanese workers and 39% in Dutch workers. Mental health shame and amotivation were positive predictors of mental health problems in the two groups. However, age and self-compassion were negative predictors of mental health problems in Japanese workers, while in Dutch workers, work engagement was a negative predictor of mental health problems. Table 4 summarises our findings, comparing Japanese and Dutch workers.

[Please insert Table 4 about here]

Discussion

This study compared the levels of, and relationships among mental health problems, mental health shame, self-compassion, work engagement and work motivation between Japanese workers and Dutch workers. Dutch workers had higher levels of mental health problems, work engagement and intrinsic motivation than Japanese workers, while Japanese workers had a higher levels of mental health shame and amotivation (Aim 1). In both Japanese and Dutch workforces, mental health problems were positively associated with

mental health shame and amotivation, and were negatively associated with work engagement and intrinsic motivation, however differences between those two groups were found in self-compassion (Aim 2). Lastly, mental health shame and amotivation were positive predictors of mental health problems in both samples. Self-compassion was a negative predictor of mental health problems in Japanese workers, whereas work engagement was a negative predictor in Dutch workers (Aim 3).

The higher levels of mental health problems suggest the serious nature of mental health status in workplaces in the Netherlands. Mental health sick leave is more common in the Netherlands than in other 30+ OECD countries (OECD, 2014), echoing our findings. The strong relationship between mental health problems and mental health shame may explain why the effects of the Dutch government's mental health initiatives, supporting mental health and returning to work (e.g., the Participation Act), have not yielded salient effects (Houtman, 2015): interventions that focus on mental health may trigger their mental health shame, leading to poor engagement in the interventions. The Dutch government and organisations may benefit from considering more positive psychological approaches to bypass mental health shame, focusing on augmenting psychological capitals (Luthans, Youssef & Avolio, 2007), to reduce concerning mental health problems (Kotera, Green & Sheffield, 2019; Kotera & Ting, 2019). As work engagement negatively predicted mental health problems in Dutch workers, interventions to augment their work engagement should be implemented to protect their mental health.

The relatively low levels of mental health problems in Japanese workers may be related to their underestimation of their mental distress (Nakamura-Taira, Izawa & Yamada, 2018). The national survey by the government reported that 61% of Japanese workers suffered from mental distress (MHLW, 2010), however only a quarter of Japanese workers were interested in employing new mental health behaviours (Horiuchi et al., 2010).

Optimistic prognosis can be problematic, as it is related with low help-seeking, leading to negative clinical outcomes. Unsurprisingly, acquiescent response style, by which respondents respond to survey items positively, is more strongly seen in collective cultures (Japan) than individualistic cultures (the Netherlands) (Harzing, 2006). Further, Japanese culture favours workers to display a friendly front, even when they are mentally distressed, known as the 'honne (what one really feels)' and 'tatemae (how one shows up to others)' culture (Doi, 1985). The Japanese 'honne' and 'tatemae' culture was associated with the social desirability biases, giving dishonest and more socially favourable answers (Kondo, Saito, Deguchi & Hirayama, 2010). Japanese workers' high amotivation can be explained by these Japanese characteristics (amotivation implies self-sacrifice, which is valued in collectivism; Hofstede, Hofstede & Minkov, 2010). Considering their high incidences of CCVD and karoshi (The Prime Minister of Japan and His Cabinet, 2016), Japanese workers' low mental health problems, relative to Dutch workers, are deemed more pertinent to their response style differences than mere score differences: these cultural characteristics might have affected the Japanese workers' responses in our study. Although Japanese workers scored higher in mental health shame than Dutch workers, future studies should employ other methods such as implicit tests to counter these response biases in self-report measures.

In both worker groups, mental health problems were positively associated with mental health shame and amotivation, and negatively associated with work engagement and intrinsic motivation. This was consistent with previous research that explored UK workers (Kotera, Adhikari & Van Gordon, 2018a; Kotera, Green & Sheffield, 2019). Their strong relationship between mental health problems and shame may again help to explain why the mental health initiatives have not had pronounced effects on workplace mental health. Considering that work engagement and intrinsic motivation were related with mental health problems, augmenting these constructs may be an effective alternative means to protect both Japanese

and Dutch workers' mental health. For example, the Disney strategy, where a worker focuses on one type of thinking mode at a time with a different posture at a different spot to explore the dreamer, realist and critic positions (Dilts, 2003), was found effective in augmenting work engagement and intrinsic motivation (Kotera & Sheffield, 2017), and relatively easy to implement in a busy workplace for its simple format (Kotera & Van Gordon, 2019). This type of practical yet effective workplace intervention should be examined in future research.

Lastly, our regression analyses identified that mental health shame and amotivation were positive predictors of mental health problems in both samples, while in Japanese workers, self-compassion was, and in Dutch workers work engagement was a negative predictor of mental health problems. These findings were additional insights to findings from previous cross-cultural studies. For example, Shimazu, Schaufeli, Miyanaka and Iwata (2010) compared the levels of work engagement between Japanese and Dutch workers, and found that Japanese workers had lower work engagement than Dutch workers. Our study further examined the relationship between work engagement and mental health, and identified that this relationship was stronger in Dutch workers than Japanese workers. Work engagement may play an important role as a solution for poor mental health in Dutch workers. Organisations and policy makers need to consider employees' engagement management, as part of their mental health strategy. A recent review identified that job crafting (proactively redesign their work to experience more meaningfulness in a workplace; Berg, Dutton & Wrzesniewski, 2007) and mindfulness interventions were particularly effective in enhancing workers' engagement (Knight, Patterson & Dawson, 2019). The effects of these interventions on mental health should be evaluated in Dutch organisations. From a cultural psychology perspective, the significance of work engagement can be explained by the Dutch quality-oriented culture, where people tend to value doing what they love (quality of life), as opposed to the success-driven culture (e.g., Japan), aspiring to achieve ambitious goals (quantity of

achievements) (Hofstede, Hofstede & Minkov, 2010). Dutch workers, by and large, may perceive a good work life as a job that they feel vigorous about (i.e., work engagement).

For Japanese workers, enhancing self-compassion, kindness towards themselves, may help ameliorate their mental health. Indeed, as previous research identified the importance of how one treats themselves internally (e.g., self-criticism, self-compassion) to mental health in Japanese workers (Kotera et al., 2018), our findings highlighted the strong impact of self-compassion on mental health, relative to other psychological constructs in this worker population. Compassion training focusing on self-compassion may be useful to mental health of Japanese people (Arimitsu, 2016; Takahashi et al., 2019). Given Japan's collective nature, trainers would need to be careful that the training is shifted towards compassion for others, which is not associated with mental health (López et al., 2018). Three-hour online self-compassion training increased gratitude, well-being, and self-compassion in healthcare workers (Rao & Kemper, 2017). Online training would be particularly useful to today's workforces including Japanese workers, who work at various sites (Kazekami, 2019). Culturally, Japan is known to have a shame culture, where people are particularly sensitive to a sense of shame (Benedict, 1946). Karoshi and karojisatsu (suicide caused by overwork) are thought to be derived from shame; as samurai's seppuku, shame of not performing one's duties can be cancelled out by killing oneself (Kawanishi, 2008). Our findings suggest that being kind to oneself may mitigate mental distress caused by shame, possibly leading to better mental health. Future research needs to explore whether enhancement of self-compassion would reduce shame, and lead to better mental health among Japanese workers.

Alternatively, developing a sense of ikigai (i.e., meaningfulness in one's life) may be effective for both Japanese and Dutch workers, pertaining to work engagement (dedication in ikigai) and self-compassion (caring for self) (Fido, Kotera & Asano, 2019; Kamiya, 2004). In line with this notion, ikigai is now embedded in the government's suicide prevention policy

in Japan for its strong relation with mental health (MHLW, 2017). The life crafting intervention (a holistic expansion of job crafting; Demerouti et al., 2019) was effective in increasing ikigai (Schippers & Ziegler, 2019). This type of intervention needs to be examined, with regard to mental health in Japanese and Dutch workers.

Though this study offers useful insights, several limitations need to be considered. First, participants were recruited through an opportunity sampling method, and types of workers (e.g., male-female ratio, industry, highest degree, fulltime worker-part-time worker ratio) were different between the two samples (as reported heterogeneity of variances, hence the Welch t-tests were conducted). Though differences of mental health constructs across industries were not significant (whereas differences between Japan and another European country, the UK were significant; Kotera, Sheffield, Green & Asano, 2020), more homogenous samples should be recruited to make more meaningful comparisons in the future. Second, this study used self-report measures, which therefore might limit the accuracy. Further, there were cultural differences in responding to self-report surveys as discussed (Harzing, 2006) (therefore this study compared relativity of these constructs in correlation and regression analyses), biological measures or implicit tests should be used to compare those two countries to counter the cultural differences. Lastly, as this was a cross-sectional study, longitudinal data would be useful, elucidating the causal direction of the associations identified in this study.

Conclusion

Workplace mental health is high on the national agenda in many countries including Japan and the Netherlands. Despite the country's mental health initiatives, notable effects have not been reported in both countries. This study compared the levels of, and relationships among mental health problems, mental health shame, self-compassion, work engagement and work motivation between Japanese workers and Dutch workers. Dutch workers had higher

levels of mental health problems, work engagement and intrinsic motivation than Japanese workers, while Japanese workers had higher levels of mental health shame and amotivation. A strong positive relationship between mental health problems and mental health shame was found in both samples. Mental health problems were negatively predicted by self-compassion in Japanese workers, and by work engagement in Dutch workers. Cultural emphasis on shame in Japan, and the quality of life in the Netherlands may help explain these differences. Interventions focusing on self-compassion and work engagement need to be examined for their effects on mental health. Findings from this study would be particularly useful to employers, managers, and staff in the human resources who work with a cross-cultural workforce to appraise their colleagues' mental health status.

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