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POLICY ADJUSTMENT AS A MEDIATOR BETWEEN OLDER WORKERS RETENTION AND AGEING WORKFORCE. A CONTEXT FOR ACTION IN ASIA

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ABSTRACT

Over the past decade, HR managers have been much concerned about the demographic changes and advised to take positive approaches to the management of organizations. These changes significantly cause population aging globally, resulting in economic and social challenges. This study aims to examine older workers' retention, policy adjustment, and the aging workforce in Thailand. Purposive sampling was used to select a total of 520 respondents from six higher education institutions. We found that despite the call to retaining older workers, the majority of employers exhibit stereotypic attitudes, and finding it difficult to retain and attract older workers. Even though there have been initiatives toward discrimination legislation concerning older workers, however, policymakers should be proactive. Government should need to develop policies that would permit increased levels of older workers' retention and create better competencies in achieving planned economic goals. Organizations need to adopt strategic approaches to age management and labor unions must show great commitment to the campaign against age discrimination.

Keywords: Older workers' retention, policy adjustment, aging workforce, higher institution, stereotype, Employment, HRM.

INTRODUCTION

Demographic changes are significantly causing population aging globally, resulting in economic and social challenges for organizations and individuals. Approximately 20% of the United States population will be above 65 years by the year 2030 (Firestone, Keyes, & Greenhouse, 2018), which is projected to make up 22% of the world population (Schröder, Flynn, Klassen, Antoniou, & Park, 2016). The percentage of the Italian population that is above sixty-five years of age is more than doubled in size and will continue to grow to 33% of the overall population by 2050 (UN, 2009). This percentage will rise at a faster pace of 19.8% by 2021, reaching 26.6% in 2030 and 32.1% in 2040 (Tangchonlatip, et. al, 2019). In Japan and Germany aging population was rated the highest percentage (Schröder et. al. 2016) and was projected to increase by 2050 including Portugal, Bosnia, Herzegovina, Korea, and Cuba (Bloom, Boersch- Supan, McGee, & Seike, 2011). In Asia continent, Thailand has been ranked the second position of aging population, after Singapore (United Nations, 2015). The proportion of population aging in Thailand has grown from 7.2% in 1993, 10.7% in 2007 to 11.4% in 2010 (Tangchonlatip, Chamrathirong, & Lucktong, 2019).

While it took one hundred and seven years to have an aging population from 7% to 14% in England and Wales (Narknisorn & Kusakabe, 2013), it only takes Thailand thirty years (Jittapunkul et al., 2001). Thailand's fertility rate has also declined while life expectancy increases (Narknisorn & Kusakabe, 2013). With family planning as well as a lower fertility rate, Thailand is facing an imbalance ratio of working population and dependency groups (Narknisorn & Kusakabe, 2013). The country's birth rates are now below replacement, causing the labor force to shrink gradually, while population aging rates grow faster (Prasartkul, Thaweessit, & Chuanwan, 2019). These major demographic changes are putting Thailand into a demographic disruption period (Prasartkul et al., 2019). Extant researches have recommended that population aging has an effect on the configuration of the workforce, and labor force participation and the aging structure will result in a new way for the future labor force, particularly in the higher institution (Kühn, Milasi, & Yoon, 2018; Abeliensky, Algur, Bloom, & Prettnner, 2020). This means that Thailand will have fewer working persons in the future (Knodel & Chayovan, 2008). Jitapunkul, Chayovan, & Kespichayawattana, (2002) cautioned that care must be taken to mitigate the negative consequences otherwise, the future is unclear (Knodel, Chayovan, Graisurapong, & Suraratdecha, 2000).

For example, Staudinger, Finkelstein, Calvo, and Sivaramakrishnan (2016) argue that past academic and policy debates concentrated on negative aspects of extending working lives prevented older people from working and ignored the possible positive results of work in later life. Some studies also argued that even though some social, physical, and mental health benefits are working longer for some people, the benefits are not likely to be universal (Maimaris, Hogan, & Lock, 2010; Heller-Sahlgren, 2013). As such, recommended for a study that will look into policy adjustment for active and productive aging, which will focus on the demonstration of genuine support to older workers, that is expected to produce a positive response from older persons in terms of their active engagement. Particularly as there is a growing number of academics reaching their 60s who may choose to stay longer in university employment, and there have been few new appointments due to the current financial limitation (Koopman-Boyden & Macdonald, 2003). To our knowledge, no study has found labor supply shortages can be addressed by hiring or retaining older workers. Except for Taylor, McLoughlin, Brooke, Di Biase, and Steinberg (2013) in Australia, which found that most of the private sector, public sector, as well as large organizations in Australia were open to hiring older workers to address a labor supply shortage, even though they were less committed to the retention

older workers, demonstrating a preference for a short-term “stop-gap” strategy. Even though researches on aging workforce in developed countries is across sectors due to different economic conditions as well as social security systems, but studies on developing countries such as Thailand only focus on the health sector. Yet, policy on aging is a top-down approach (Phillips & Chan, 2002) and has not reflected this perspective. For example, Larkin and Neumann (2009) examine policies and practices concerning the older academic workforce in Australia. The finding showed that there is a reasonable degree of difference across universities and different States. The results called the need to further examine institutional policies and practices from a different context (Larkin & Neumann, 2012). Particularly as there is a gap between ideology and reality in the policy of the government in Thailand such that policy on aging in Thailand does not adapt well to societal changes (Narknisorn & Kusakabe, 2013). Mainly as the policy ignores older people’s viewpoints and needs, generational differences, gender issues on aging (Narknisorn & Kusakabe, 2013).

Academicians are not left out of this social change that affects older workers (Cheng & Chan, 2006). In Thailand aging academic workforce presents an unprecedented human resource crisis for its universities. Universities depend on the intellectual capital of their workforce to attain strategic success (Newell, Robertson, Scarbrough, & Swan, 2002). Yet Thailand is confronted with unprecedented challenges of aging academic workforce. This comes at a time when ongoing demand for higher education is high but competitive funding coupled with managerial and corporatist governance have kept the academic workforce lean (Larkin & Neumann, 2012). The consequences of this imminent mass exit of older workers in the higher institution could have a ripple effect on Thailand’s economy. Just like every country, universities contribute significantly to Thailand’s economic growth. Thus, sustaining an older workforce in universities required policy adjustment to retain older workers which subsequently sustain Thailand’s economy. Hugo (2010) opined that a more strategic method to the management of this critical resource is required. This shift calls for questioning the sustainability of HRM and the future of Thailand’s labor supply, subsequently the prospects for the country’s economic growth. Many organizations will face the challenge of managing knowledge and dealing with skill gaps created by the exit of older workers who over the years make the best use of their experience and knowledge to the advantage of the organizations. The population of the younger generation completing education and joining the workforce in Thailand is insufficient to replace the retirees. The implication is that workforce deficiency is imminent in Thailand. Knowing the shortage of qualified employees is one of the biggest global challenges to achieving organizational effectiveness and this problem is expected to increase over time (Buchan & Aiken 2008). This calls for urgent research attention by acknowledging this challenge. Recruiting foreign workers is not sufficient to assuage the damage knowing that the long-term forecasts of a declining population with fewer entrants into the workforce. The research study will understand how the universities are dealing with this significant human resource issue. This study will examine the mediating role of policy adjustment on the relationship between older worker’s retention and the aging workforce.

LITERATURE REVIEW

Older Workers Retention

Older workers’ retention has remained a significant and widely researched topic in the literature and has justifiable gain momentum in the management literature (Gonyea & Maiden, 2009). The range of responses from the literature showed that there is little precise agreement on what constitutes an older workforce. The definition of an older worker varies for different purposes and across the other

environment. We operationalize an older worker in this study as an individual who is 55 years and over. Particularly in jurisdictions with mandatory retirement--someone nears the retirement age. As industrial relation systems change, researchers have advocated for new thinking in the retention and employment of older workers (Clarke, Donnelly, Hyman, Kelly, McKay, & Moore, 2011). There is a strong acknowledgment that the stigma associated with old workers and stereotypes (Nelson, 2002) must be substituted with novel, uncluttered and convincing ideas regarding the contribution from the niche of the labor market. According to (Baruch, Sayce, & Gregoriou, 2014), different dynamic view is required to look into the social structure with modification in staffing as well as retention of older worker because an older worker does not essentially signpost decline or preparation for retirement, however a prospect of continuing, unchanging contribution (Baruch et al., 2014). This argument was in response to the view by previous researchers that age is a sign to inspire older workers to withdraw from the workforce to enhance the employment of the younger generation (Baruch et al., 2014). An examination of labor market data showed that this argument is not functional (OECD, 2013). Many organizations have witnessed increased costs in workforce aging. However, few organizations have noticeable growth in productivity in an aging workforce (Burke, 2016). Retention of older workers helps to lower turnover, hiring as well as training cost, positive work motivations, little supervision and can help pass important knowledge to younger workers (Burke, 2016). Older workers have certain benefits that organizations can rely on, such as reduced absenteeism, fewer accidents, as well as higher levels of job satisfaction than younger workers (Salthouse & Maurer, 1996). Organizations are required to enlarge the retention of the older workers by inspiring them to remain to work beyond their usual retirements and persuade retired persons who are skilled and capable of returning to the workforce because the performance of older workers is comparable to younger workers (Burke, 2016). An important characteristic of retaining older workers is because of their work commitment, past as well as pragmatic knowledge of the recurring nature of the economy with businesses, which is beneficial to organizations in a time difficult economic situation (Conen, Wieteke, & Schippers, 2010; Eversheds, 2009). This notion alludes to the advantages of intergenerational organizational knowledge surrounded by organizations (Baruch et al., 2014). This implies there is a strong economic waste for organizations and countries by systematically stopping older workers who have the knowledge, ideas, skills, and willingness to continue to work. Policies intended to extend working lives can be connected to this. In Japan after the end of World War II, one of the major economic challenges was the supply as well as retention of skilled labor (Schröder, Flynn, Klassen, Antoniou, & Park, 2016). The Japanese-style employment organizations have made the compensation of older workers highly expensive, the same way most of the employers have expressed reluctance to retain older workers without government subsidies (Schröder et al., 2016). Nevertheless, employers are also concerned about losing skills when workers retire (Schröder et al., 2016). Employers in Japan appear to solve this problem in two ways. First, by relying on government subsidies and pension incentives to retain older workers, for instance, a 2004 law offered employers administrative support subsidies to manage aging workforces (Schröder et al., 2016). SMEs employers also make use of older workers to balance skills shortages resulting from younger graduate preferences for large organizations (Casey, 2005).

There is also an opposite argument that older workers are usually targeted for retirement. Some also believe that employee productivity declines with age and that older workers cannot adapt fast to technological development compared to younger workers. Such claims are largely misreading because a study has found no significant differences between the two groups' performances (Sullivan & Duplaga, 1997). It has been argued that there is no age barrier in job performance of older workers and that in some situation older workers outperform other generation in non-core office tasks such as organizational citizenship behavior (Ng & Feldman, 2008) and knowledge-intensive work settings

such as universities (Kyvik & Olsen, 2008). Van Ours (2009) and Van-Ours and Stoeldraijer (2011) argued that no sign of a productivity gap can be found in older workers. Some studies emphatically demonstrated that older employees are assets in the workplace (Ferris & King, 1992; Reio & Sanders-Reio, 1999). Therefore, compulsory retirement can result in losing skilled workers, which consequently affects business productivity (Žnidaršič & Dimovski, 2009). Baruch et al. (2014) argued that old workers' age does not essentially connote the speedy loss of human capital. In principle, organizations are not averse to recruiting and training older workers (Thomas & Pascall-Calitz, 2010). But organization attitude to older workers is differentiated among persons who are positive about their skills as well as knowledge and their continuing value to the organization in Finland, and those who are less excited about older workers' retention and employment in the UK and Dutch research (Beck, 2010; Conen et al., 2010). Altering these attitudes to recruit older workers might be complex because organizations recognized that their only means of letting people go is through performance management (Baruch et al., 2014).

Though in the past, literature argued that older workers lack orientation towards flexibility, innovation and change (Kidwell, 2003), and are perceived to be less productive in and motivated about their jobs (Newton, 2006). While undesirable, unjustified stereotyping against older workers continues with workplace age-discrimination is prevalent in the organization (Furunes & Mykletun, 2010). This age discrimination has high negative consequences for the older workers in an organization during/after organizational downsizing, an early retirement where employees that subsequently survive downsizing will feel more like the victims than the survivors (Chen & Mykletun, 2011). However, these arguments are subject to assumption and do not hold in a growing knowledge-based economy (Shah & Gregar, 2014). Some researchers have revealed no direct link between employee age with work performance, workplace accidents, and occupational safety and health (Adams, DeArmond, Jex, & Webster, 2013; Ng & Feldman, 2013). In a study in Canada, Towers Perrin (1991) found that two-thirds of organizations in Canada were not concerned about the aging workforce. The researchers resolved that Canadian organizations express little concern or action about the aging workforce. Researchers have also argued that older workers are not less effective than younger workers—even though there are differences between jobs; older workers have fewer accidents than younger workers and are less likely to leave an organization (Žnidaršič & Dimovski, 2009). Therefore, this explains why the retirement age in many countries is being constantly reviewed upwards. With the growing increase of older workers and more to be retired, it is imperative to retain older workers in the labor force, and any organization that failed to take an active step to solve the problem of aging workforce will encounter serious workforce shortage in the coming years (Armstrong-Stassen & Templer, 2005).

Even though research has been conducted on older workers, the existing knowledge of retention of older workers is quite few (Shah & Gregar, 2014). The present study will build on and extend HR researches viewpoint by examining how retention of older workers influences the ageing workforce, and older worker's desire to remain. Following the above arguments, the following hypothesis is proposed to achieve the objective for this study:

Hypothesis 1: there is a positive relationship between the retention of older workers and the ageing workforce.

Policy adjustment

Previously Thailand did not have national policy for older persons till 1986 when the government of Thailand replied to the first world assembly on aging in Vienna in 1982 by establishing Thai first

national long-term plan of action for older persons with a coverage from 1986-2001 (Knodel et al., 2000; Jitapunkul & Wivatvanit, 2008). The objective of the policy is to offer knowledge of aging, adjustment as well as healthcare to older people, in order to inspire older worker’s community support, protection as well as welfare services and to increase older people’s social responsibilities (Narknisorn & Kusakabe, 2013). Policy strengthen older people to be active and continue to contribute to the organization and the society in general. In a study, Herrera and Nieto (2008) argued that supportive policy promote productivity and innovation performance. Chandran, Govindaraju, Krishnan Vijayaraghavan, and Pandiyan (2013) uses NIS data from the ministry of science, technology and innovation in Malaysia, and they found a significant relationship between government policy support and innovative performance. Rasiah (1999) found the mediator role of government policy significantly explain the transformation of English hardware into high performance engineering organization. Older people can be valued as contributors and sources of knowledge and they can be motivated to be active through policy plan (Narknisorn & Kusakabe, 2013). Policy promote positive attitudes toward older workers, identified directions for supporting older people and help to help to develop national work on the elderly and specifying personnel involved (Jitapunkul & Wivatvanit, 2008). The policy also help to strengthen multigenerational relations, older people’s worth, and activities among family members (Narknisorn & Kusakabe, 2013). Thus, adjusting the policy will assist in monitoring and developing the knowledge of the older workers (Jitapunkul & Wivatvanit, 2008).

A study by Penner (2002) argued that policy plays a significant role in structuring employers' plans. As policy dictates a minimum notice before termination of job, regulate which reasons are recognized to be just or unjust for dismissal and determine the compensation for workers in the eventuality of termination (Heckman, 2000). As such, policy adjustment will help promote practical standards and rules across all sectors, including public, community, and government organizations to encourage and monitor cooperative practice and progress (Jitapunkul & Wivatvanit, 2008). The policy plan of UPM-Kymmene Paper Mill in Malaysia helps to combat age discrimination because of the belief that older workers possesses “tacit knowledge” where older and younger generation employees can match to assist in transfer of knowledge (Saga, 2011). As such, policy adjustment is a clear starting point for any reform (Penner, 2002). Thus, policy adjustment will help to promote knowledge retention and the ageing workforce. Subsequent to the above arguments, the following hypothesis is proposed:

Hypothesis 2: there is a positive relationship between Policy adjustment and the ageing workforce.

Hypothesis 3: Policy adjustment will mediate the relationship between older worker’s retention and ageing workforce.

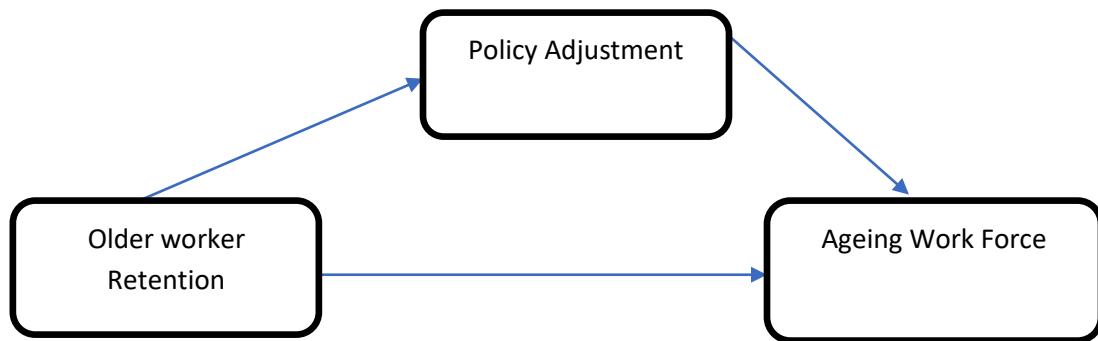


Figure 1. *Conceptual Framework*

The above conceptual framework was underpinned by social integration theory and human capital theory (Blau, 1960; Ployhart & Moliterno, 2011). The human capital theory postulates that an organization or country should recognize their most important human capital, often embodied in their older workers, and find ways to keep such employees or pass along their skills and abilities to other workers (Truxillo, Cadiz, & Rineer, 2014).

As showed in Figure 1 above, a critical review of past researches offers the basis to develop the framework as well as the hypothesis for this study. The framework showed two types of relationships existed between the identified factors. Firstly, the predicting variables such as, older worker's retention have a direct impact on the outcome variable (ageing workforce). The framework also revealed the indirect impact between older worker's retention and ageing workforce through the mediation of policy adjustment. This is important because retaining older workers in the higher institutions is sustaining Thailand economy, particularly as universities are the powerhouses of knowledge, innovation as well research. At this period of current financial constraints with few new appointments, allowing mass exit of retirement may lead to brain drain and economic disruption. Acknowledging these challenges, this study developed this framework to proactively come up with plans and programs for this sector. Particularly, as little research attention has been focus on the educational sector which currently housing majority of the government workforce. Theory of social integration (Blau, 1960) underpin this study. Social integration is a dynamic and structured process in which all members participate in dialogue to achieve and maintain peaceful social relations. Social integration prevails in a group if bonds of attraction unite its members. Persons interested in becoming integrated members of a workplace would make attractive relationship, and the resulting competition. An individual who can offer valuable services to the organization, will also compare the organization to surrender their defensive tendencies as well as manifest their attraction to them. The process in which his services are exchanged for their respect and defense gives rise to social differentiation (Blau, 1960). Social integration defines older worker's retention and ageing workforce relationship using cooperative mutual benefits. All human interactions are shaped by subjective cost benefit analysis (Blau, 1964). Older people has abundant resources that can be exchanged based on specific supporting policy, such exchanges can create excellence mutual benefit for all stakeholders. This showed that high quality social integration between older workers in workplace can pay off the potential negative outcome of stereotypic perception of the personality trait of older worker (Kamdar & Dyne, 2007). When the government develop policy to encourage older worker retention, the older workers incurs obligations to repay the society so that the exchange is mutually beneficial (Ishak & Alam, 2009). Therefore, the spontaneous gesture of goodwill will inspire commitment on the part of the employees to reciprocate the good action (Aryee, Budhwar & Chen, 2002).

METHODOLOGY

Quantitative research method has been suggested in managing the challenges of an ageing workforce (Čiutienė & Railaitė, 2014). As such, this study will use quantitative research approach because quantitative research describes the nature of the relationships between variables being examined. Though, the whole population of older workers in Thailand cannot be the population for this study because of high costs, time constraints and difficulty in collecting their data. Hence, workers in Kasetsart University, Mahidol University, Chulalongkorn University, Chiang Mai University, and Naresuan University all in Bangkok, Chiang Mai, and Phitsanulok respectively constituted the population for this study. These universities are officially recognized first top five in Thailand. Apart from the above, Bangkok and Chiang Mai are strategic city to the economy of Thailand. Particularly,

Workers in Chamai and Bangkok faces daily pressures from institutional environments which can easily cause them stress and pressure that will make them to aged faster than expected. As such, collecting data from these organizations will provide insight into best practice that can help in preventing or reacting to ageing society. While workers in Naresuan University Phitsanulok, was only used for the pilot survey, older workers in Kasetsart University, Mahidol University, Chulalongkorn University, and Chiang Mai University constituted the sample for the main study. A purposive sampling was used to focus on the people with particular characteristics with the relevant research information (Etikan et al., 2016).

Participants and procedure

We used two data sources to answer the research questions. First, we conducted a survey among university workers in Thailand. A sample of workers in six Thailand higher institutions was drawn from the staff identification list of the institutions. We first notify ten universities informing them about the aim of the study. But only five showed the willingness to provide the needed data. From the staff data base list of the university, we selected those people whose year of employment indicated that they have spent over 15 years in the service. We sent emails informing them that we were conducting a study on older worker retention, policy adjustment and ageing workforce in order to promote the effective utilization of older workers in workplace. After one week we mailed the questionnaire to each of the selected respondents. The total sample was comprised of 520 respondents from six higher institutions. We received a total of 341 completed questionnaires representing a 65.6 percent response rate. 8 percent of the respondents who completed the questionnaire were academic staff. 17 percent held administrative position. Questionnaires were completed by male workers (44 percent), female workers (56 percent), contract staff (14 percent), and full time staff (86 percent). Data collection took place from August 2018 to March 2019. Some of the respondent did not indicate the name of their institution as such, the distribution of organization' participation could not be counted. In terms of total work experience, 13 percent had 10-15 years' experience, 38 percent had between 16 to 20 years' experience, and the remaining 49 percent had over 20 years of experience. The respondents were generally experienced practitioners in the sampled organizations.

Measures

The questionnaire was developed using a five-point liker scale ranging from 1 (strongly disagree) to 5 (strongly agree) for all the twenty-nine items. The five Likert statements required the respondents view about the items in policy adjustment, retention of older workers and ageing workforce. Older workers' retention questions were drawn from (MOWIRT; 1987; Rubin et al., 1988; Shacklock, 2008). Ageing Workforce was measure by work ability, health and emotional wellbeing and self-efficacy items adapted from (Sherer, Maddux, Mercandante, Prentice-Dunn, Jacobs, & Rogers, 1982; Medical Outcomes Trust, 2002). All instruments have previously been validated. Parallel back and forth translation was used to obtain a Thai version through a certified translation center. For the Policy adjustment items that focus on government policies supporting older workers, were adapted from (Busenitz, Gomez, & Spencer, 2000).

ANALYTICAL APPROACH

To test the theoretical model, structural equation modeling was conducted. This was achieved by applying the modern and the most accepted procedure using smart PLS software (Ringle et al., 2014).

The PLS path modeling is used for this study because it remained the most appropriate technique. As smartPLS has the advantage of estimating the structural model and measurement model simultaneously (Chin, Marcolin, & Newsted, 2003; Spector & Jex, 1998). Besides, compared to other path modeling software (such as, AMOS), the Smart PLS has a friendly graphical user interface that assist the users to test a mediating effect using Preacher and Hayes (2008; 2004) bootstrapping techniques of estimating indirect effects in simple mediation models.

Measurement model

Hair, Hult, Ringle, and Sarstedt (2014) suggested that measurement model should first be evaluated before evaluating the structural model which reported the significance of the parameters. Following this recommendation, the present research first evaluate the measurement model before evaluating the structural model in order to ascertain the validity and reliability of the measures and to make conclusion about the relationship that exist between older person retention, policy adjustment and ageing workforce. In order to evaluate the scales, the individual item reliability, internal consistency reliability, convergent validity, as well as discriminant validity were conducted were ascertained in the present study (Henseler, Ringle, & Sinkovics, 2009) as shown in Table 1 and Figure 2. Concerning the individual item reliability, outer loadings lower than 0.50 were deleted from the PLS measurement model we follow the suggestion by (Barclay, Thompson & Higgins, 1995). Based on the practice, out of the twenty-nine items in our reflective measurement model, only six items were deleted. Thus, twenty-three items with loadings between 0.610 and 0.865 were retained (Table 1 and Figure 2).

Table 1:

Results of the Measurement model

Constructs/indicators	Loading	Composite reliability	AVE
Retention of Older Workers			
OWR10	0.674	0.907	0.549
OWR3	0.748		
OWR4	0.692		
OWR5	0.832		
OWR6	0.752		
OWR7	0.775		
OWR8	0.686		
OWR9	0.758		
Policy Adjustment			
PA1	0.630	0.894	0.588
PA2	0.663		
PA3	0.823		
PA4	0.847		
PA5	0.740		

PA6	0.865		
Ageing Workforce			
AW1	0.802	0.926	0.585
AW10	0.610		
AW2	0.826		
AW4	0.773		
AW5	0.770		
AW6	0.777		
AW7	0.827		
AW8	0.784		
AW9	0.691		

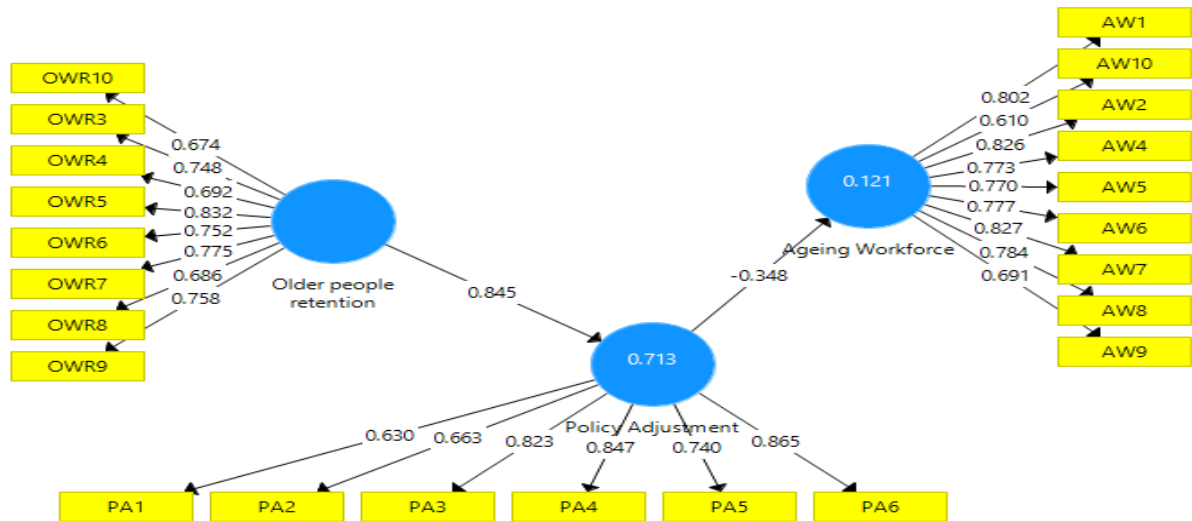


Figure 2. *Measurement Model*

Lastly, this study utilized Fornell and Larcker’s (1981) criterion to determine the discriminant validity. In view of this, the square roots of average variance extracted were compared with the correlations between the latent constructs (Fornell & Larcker, 1981) (Refer to Table 2). As demonstrated in Table 2, the square root of the average variances extracted was all higher than the correlations between latent constructs, thus signifying satisfactory discriminant validity (Fornell & Larcker, 1981).

Structural model

We measured the structural model with the presence of policy adjustment as a mediator variable. Figure 2 displayed the detailed results of the full PLS path model. As demonstrated Figure 2, the coefficient of determination (R^2) was 0.721, indicating that the research model explains 72.1% of the total variance in ageing workforce. After conducting the blindfolding procedure (Chin, 1998; Spector & Jex, 1998) the results showed that the Q^2 value for ageing workforce was 0.308 and statistically

above zero, consequently, signifying predictive relevance of the model (Chin, 1998; Henseler et al., 2009).

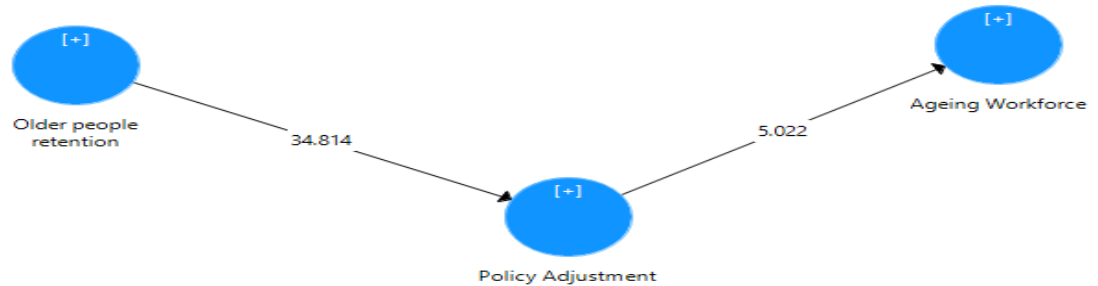


Figure 3. *Structural Model*

Additionally, this study makes use of standard bootstrapping procedure with a number of 5000 bootstrap samples and 212 cases to assess significance of the path coefficients (Henseler et al., 2012; Spector & Jex, 1998) with a mediator variable integrated in the PLS path model. The result from Table 3 shows that there is significant relationship between older workers’ retention and ageing workforce ($\beta=0.845$; $t=3.69$; $p < 0.05$) supporting H1. Additionally, Table 3 shows that there is significant relationship between policy adjustment and ageing workforce ($\beta=0.348$; $t=3.48$; $p < 0.05$) supporting H2. Finally, policy adjustment significantly mediates the relationship between older workers’ retention and ageing workforce ($\beta=0.137$; $t=5.022$; $p < 0.05$) supporting H3.

Table 2.

Discriminant Validity of the Constructs

	Mean	SD	1	2	3
Older people Retention	3.40	0.812	0.767		
Policy Adjustment	3.37	0.700	0.115	0.780	
Ageing Workforce	3.40	0.804	0.212	0.472	0.826

Table 3.

Results of the Partial Least Squares Path Analysis

Direct Path	Std. Beta	Std. Error	t. Value	Decision		
H1 Retention of Older worker > Policy adjustment	0.845	0.026	3.69**	Supported		
H2 Policy adjustment > Ageing workforce	0.348	0.048	3.48**	Supported		
Indirect Path (Mediating effect)					95%LL	95%UL
H3 Retention of Older worker > Policy adjustment>Ageing workforce	0.137	0.027	5.022**	Supported	0.025	0.117

DISCUSSION

This study examines older workers' retention, policy adjustment and ageing workforce in Thailand. We found that the relationship between older workers' retention and policy adjustment remains significant. Similarly, policy adjustment has a significant positive relationship with ageing workforce. As such, policy adjustment significantly mediates the relationship between older workers' retention and ageing workforce which lends support for Hypothesis 2. From the result above we can conclude that retention of older workers remained a force to reckon with in the labour market in view of the current economic situation. With the growing trends of ageing workforce in Asia and Thailand in Particular, policy needs to be adjusted to support older people through extension of the retirement age. The elderly people are not fundamentally vulnerable or burden but are capable of contributing to social economic development. There should be an increased awareness about the implications that aging workforce will bring for the organizations and human resource in particular. The demographic shift in terms of life expectancy has showed that there will be a growing shortage of young workers and organizations have no alternatives than to rely on older workers to meet current skill demands. The tacit knowledge and experience possess by older workers cannot be acquired. The need to retain older workers is unavoidable to make use of their rich expertise. Older workers have lower possibility of turnover in the organization unlike younger generational workers. Most organizations are misled by the notion that older workers have poor record of performance and deficiency in adapting to technological changes quickly and be flexible. These negative stereotypes strongly affect the amount of training focus for older workers resulting to outdated skills and knowledge. It is important highlight that older workers are assets and possess valuable knowledge that is vital to the sustainability of today's economy. It can be argued that these qualities can be found in many employees across all age

groups. But, older workers are not afraid of their own shadow, are team players, better in leadership, and can drive business needs and create sustainable outcomes. Older workers are not only the most engaged but exhibit the highest level of organizational commitment and are more satisfied with their jobs unlike the younger generation.

While age 60 remained the compulsory retirement age of any Thai employee unfortunately, the age limit does not apply to most western teachers currently working in Thailand. Particularly native English teachers in Thailand are not bound by this retirement law. Majority of these Western teachers because of their high demand in Thailand are in between the ages of 65-70 after retiring from their home countries. This could have a negative implication particularly to the native Thai older worker productivity as they may perceive themselves to be economically inactive not because of age but due to lack of opportunity to contribute to the organization even at a stage when they can make their contribution. This situation needs to be balanced with policy makers to revisit the retirement to accommodate flexible retirement opportunities. Even though over the time it has always been rumored that the retirement age will be raised from age 60 to 65 years because of the shortage of qualified skills in Thailand, this expectation has never come to reality. As Thailand rapidly transforms into an ageing society, the likely economic and social consequences of retiring workers at age 60 is one issue that employers, and policymakers should reconsider. For example, Denmark has risen the retirement age to 75 years to cope with an average life expectancy of 90 years. Thailand should do same because Thais retire at 55 on average but their life expectancy is approximately 75 years. The implication is that the government will have to pay for pensions for 20 years.

Besides, increasing the retirement age for Thais, the government and organization can introduce incentives to work longer. In a more flexible scenario, employers should engage older workers in discussion to exchange ideas about what each other expects. These decisions can influence older workers' intentions to continue working. Organizations also need to develop policy against stereotypy and clearly communicate this to younger employees as the willingness of older workers to transfer knowledge and their productivity needs some elements of reciprocity. Otherwise, extending the retirement age and making older workers to stay back in the workforce will not yield beneficial outcome and the system is bound to collapse. We therefore suggested that the retirement age for older workers in Thailand civil service should be extended from 60 to 65 this will structurally help Thailand to meet the current challenges in her labour market and helping older workers to transfer tacit knowledge to younger generation. Doing this will not only facilitate intergenerational cooperation among workforce but also challenge stereotypical perception about older worker's productivity. Differences in individual employee's age should be connected to the individual capital such as skills that the individual is able to bring to the job. As older worker does not translate to rapid loss of human capital, memory or work ability. Organizations have a huge benefit to gain by retaining and utilizing older workers' professional knowledge. One among many benefit is that older workers will help to reduce organization cost of recruitment by helping to develop younger employees on the job.

Implication

This study revealed the significant of retention of older workers and policy adjustment on ageing workforce. The results have some implications for human resource managers/practitioners, policy makers and older workers. The implication is more complex for organizations as not all older workers need to be retained. Some older workers do not want learning and development at their late career but want something different in late career, looking for what they have to give back to the society. As such, organizations have to interact with older workers to see what will make them extend their

working lives. The implication for older workers is that for them to gain the cooperation of other generations, the need for social skills and continuous learning particularly keeping to date with technological devices is imperative. Though older workers have difficulties with social skills when compared to their younger counterparts, lack of these skills make them to be perceived by younger generations as not technologically flexible more resistant to change and reluctant to learn new things. Hence, older workers need to demonstrate social skills to gain intergeneration cooperation. Social skills are crucial for the transfer of knowledge and keeping good relations with co-workers. Without good social skills, older workers would not be able to express their changing needs and wishes in the workplace. This will result to increase chances of stereotyping in workplace and leading to an increased chance of job dissatisfaction and their retention beyond their retirement age. The human resource managers should help to close these stereotypic gaps that currently exist in organizations about the retention of older workers and help organization to develop a new approach by engaging older workers. Similarly, managers should come to the understanding that younger workers do not possess sufficient skills to make up for the huge skill gap the older workers will leave behind in the coming years. Instead of focusing on the aging workforce as a problem, it is important HR managers think of the opportunity older workers presents. Though some will experience health declines with age, in many ways, older workers are among the most skilled and productive workers, brings high sense of maturity and professionalism to the job, possession of stronger work ethic, more reliable, loyal and committed; and experiencing less turnover.

CONCLUSION

This study examined ageing workforce in the service industry in Thailand. While there is a large body of studies on ageing workforce, there is dearth of research about the mediating role of policy adjustment on older workers' retention and ageing workforce specifically in service industry such as educational institutions. Unlike other industry, education sector in Thailand suffers from attitudes to retaining older workers' retention. Population aging is recognized as one of the major universal risks in the coming year. It can be concluded that different industry may call for different strategies regarding retirement policy however much research is still required in this area.

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REFERENCES

- Abeliansky, A., Algur, E., Bloom, D. E., & Prettnner, K. (2020). *The Future of Work: Challenges for Job Creation Due to Global Demographic Change and Automation*.
- Adams, G. A., DeArmond, S., Jex, S. M., & Webster, J. R. (2013). Older workers, occupation stress and safety. In J. Field, R. J. Burke, & C. L. Cooper (Eds.), *The Sage handbook of aging, work, and society* (pp. 266-281). London: Sage.
- Anderson, T., & Kohler, H.-P. (2013). Education fever and the East Asian fertility puzzle: A case study of low fertility in South Korea. *Asian population studies*, 9(2), 196-215.

- Armstrong-Stassen, M., & Templer, A. (2005). Adapting training for older employees: The Canadian response to an aging workforce. *Journal of management development*, 24(1), 57-67.
- Aryee, S., Budhwar, P. S., & Chen, Z. X. (2002). Trust as a mediator of the relationship between organizational justice and work outcomes: Test of a social exchange model. *Journal of organizational Behavior*, 23(3), 267-285.
- Ball, C. (2009). Ageing and work. *Quality in ageing and older adults*, 10(2), 47-53.
- Barclay, D., Thompson, R., & Higgins, C. (1995). The partial least squares (PLS) approach to causal modeling: Personal computer adoption and use as an illustration. *Technology Studies*, 2, 285–309.
- Baruch, Y., Sayce, S., & Gregoriou, A. (2014). Retirement in a global labour market: a call for abolishing the fixed retirement age. *Personnel Review*, 43(3), 464-482.
- Beck, V. (2010). Working and Ageing”, European Centre for the Development of Vocational Training, Publications of the European Union.
- Becker, G.S. (1975). *Human Capital*, University of Chicago Press, Chicago, IL.
- Blau, P. M. (1960). A theory of social integration. *American journal of Sociology*, 65(6), 545-556.
- Blau, P. M. (1964). Justice in social exchange. *Sociological inquiry*, 34(2), 193-206.
- Bloom, D. E., Boersch-Supan, A., McGee, P., & Seike, A. (2011). Population aging: Facts, challenges, and responses. PGDA Working Paper No. 71: 111. Harvard University, Cambridge.
- Blossfeld, H.-P., Buchholz, S., & Hofäcker, D. (Eds.) (2006). *Globalization, uncertainty and late careers in society*. New York, NY: Routledge.
- Burke, R. J. (2016). Organizational Initiatives to Develop and Retain Older Workers☆. In *The Aging Workforce Handbook: Individual, Organizational, and Societal Challenges* (pp. 27-57). Emerald Group Publishing Limited.
- Busenitz, L. W., Gomez, C., & Spencer, J. W. (2000). Country institutional profiles: Unlocking entrepreneurial phenomena. *Academy of Management journal*, 43(5), 994-1003.
- Casey, B. (2005). The employment of older people: Can we learn from Japan? *Geneva Papers on Risk: Issues and Practice*, 30, 620637.
- Chand, M. & Tung, R.L. (2014). The aging of the world’s population and its effects on global business”, *The Academy of Management Perspectives*, Vol. 28 No. 4, pp. 409-429.
- Chandran Govindaraju, V. G. R., Krishnan Vijayaraghavan, G., & Pandiyan, V. (2013). Product and process innovation in Malaysian manufacturing: The role of government, organizational innovation and exports. *Innovation*, 15(1), 52-68.
- Chen, Y., Wang, J., & Yang, Z. (2015). The human factors/ergonomics studies for respirators: a review and future work. *International Journal of Clothing Science and Technology*, 27(5), 652-676.
- Cheng, S. T., & Chan, A. C. (2006). Filial piety and psychological well-being in well older Chinese. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 61(5), P262-P269.
- Chin, W. W. (1998). The partial least squares approach to structural equation modeling. In G. A. Marcoulides (Ed.), *Modern Methods for Business Research* (pp. 295-336). Mahwah, New Jersey: Laurence Erlbaum Associates.

- Chin, W. W., Marcolin, B. L., & Newsted, P. R. (2003). A partial least squares latent variable modeling approach for measuring interaction effects: Results from a Monte Carlo Simulation study and an electronic-mail emotion/adoption study. *Information Systems Research*, 14, 189-217. doi: 10.1287/isre.14.2.189.16018
- Clarke, L., Donnelly, E., Hyman, R., Kelly, J., McKay, S. & Moore, S. (2011). What's the point of industrial relations? *The International Journal of Comparative Labour Law and Industrial Relations*, Vol. 27 No. 3, pp. 239-253.
- Conen, S., Wieteke, H.K. & Schippers, J.J. (2010), Are Employers Changing their Behavior towards Older Workers?, Netspar, Network for Studies on Pensions, Aging and Retirement Paper No. 21, March.
- Conen, W. S., Henkens, K., & Schippers, J. (2012). Employers' attitudes and actions towards the extension of working lives in Europe. *International Journal of Manpower*, 33(6), 648665.
- Das, B., & Sengupta, A. K. (1996). Industrial workstation design: a systematic ergonomics approach. *Applied Ergonomics*, 27(3), 157-163.
- Das, B., & Shikdar, A. A. (1999). Participative versus assigned production standard setting in a repetitive industrial task: a strategy for improving worker productivity. *International Journal of Occupational Safety and Ergonomics*, 5(3), 417-430.
- Dekker, S. W., Hancock, P. A., & Wilkin, P. (2013). Ergonomics and sustainability: towards an embrace of complexity and emergence. *Ergonomics*, 56(3), 357-364.
- Diaper, D., & Stanton, N. A. (2004), *The Handbook of Task Analysis for Human-Computer Interaction*, Lawrence Erlbaum Associates, Mahwah, NJ.
- Dorn, D., & Sousa-Poza, A. (2008). 'Voluntary' and 'involuntary' early retirement: An international analysis. *Applied Economics*, 42(4), 427438.
- Dul, J., Bruder, R., Buckle, P., Carayon, P., Falzon, P., Marras, W.S., Wilson, J.R. & van der Doelen, B. (2012). A strategy for human factors/ergonomics: developing the discipline and profession", *Ergonomics*, Vol. 55 No. 4, pp. 377-395.
- Ebbinghaus, B., & Hofäcker, D. (2013). Reversing early retirement in advanced welfare economies: A paradigm shifts to overcome push and pull factors. *Comparative Population Studies*, 38(4), 807840.
- Eversheds (2009). Review of Age Discriminations Law: How will employers be affected? Eversheds Report, Autumn.
- Firestone, S. K., Keyes, L., & Greenhouse, E. (2018). Planners and aging professionals collaborate for livable communities. *Working with Older People*, 22(1), 20-29.
- Flynn, M., Upchurch, M., Muller-Camen, M., & Schroder, H. (2013). Trade union responses to ageing workforces in the UK and Germany. *Human Relations*, 66(1), 45-64.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research* 18, 39-50.
- Gonyea, J. & Maiden, R.P. (2009). *The Older Worker and the Changing Labor Market: New Challenges for the Workplace*, Routledge, Abingdon.
- Hair, J. F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014). Partial least squares structural equation modeling (PLS-SEM). *European Business Review*, 26, 106-121. doi: doi:10.1108/EBR-10-2013-0128
- Harper, S. (2014). Economic and social implications of aging societies. *Science*, 346(6209), 587591.

- Heckman, J. J. (2000). Policies to foster human capital. *Research in economics*, 54(1), 3-56.
- Helander, M. G. (1997). Forty Years of IEA: Some Reflections on the Evolution of Ergonomics. *Ergonomics*, Vol. 40, pp. 952–961.
- Heller-Sahlgren, G. (2013). Work longer, live healthier: The relationship between economic activity, health and government policy. *Live Healthier: The Relationship Between Economic Activity, Health and Government Policy* (May 16, 2013).
- Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. In R. R. Sinkovics & P. N. Ghauri (Eds.), *Advances in International Marketing* (Vol. 20, pp. 277-320). Bingley: Emerald
- Hollnagel, E., Ed. (2003). *Handbook of Cognitive Task Design*, Lawrence Erlbaum Associates, Mahwah, NJ.
- Holman, D., Wall, T. D., Clegg, C. W., Sparrow, P., & Howard, A. (2003). *New Workplace: A Guide to the Human Impact of Modern Working Practices*, Wiley, Chichester, West Sussex, England.
- Howell, L. (2013). Global risks 2013. available at: <http://opim.wharton.upenn.edu/risk/library/>
- Ishak, N. A., & Alam, S. S. (2009). The effects of leader-member exchange on organizational justice and organizational citizenship behavior: Empirical study. *European Journal of Social Sciences*, 8(2), 324-334.
- Jitapunkul, S., Chayovan, N., & Yodpetch, S. (2001). *Elderly in Thailand: An Extensive Review of Current Data and Situation and Policy and Research Suggestion*. Bangkok: The Thailand Research Fund.
- Jitapunkul, S., Chayovan, N. & Kespichayawattana, J. (2002). National policies on aging and long-term care program for older persons in Thailand”, in Phillips, D. and Chan, A. (Eds), *Aging and Long-term Care: National Policies in the Asia-Pacific*, Bestprint printing Co., Singapore.
- Jitapunkul, S., & Wivatvanit, S. (2008). National policies and programs for the aging population in Thailand. *Ageing international*, 33(1), 62-74.
- Kamdar, D., & Van Dyne, L. (2007). The joint effects of personality and workplace social exchange relationships in predicting task performance and citizenship performance. *Journal of Applied Psychology*, 92(5), 1286.
- Karwowski, W. (2006). The discipline of ergonomics and human factors. *Handbook of human factors and ergonomics*, 3, 3-31.
- Karwowski, W., (1998). Selected Directions and Trends in Development of Ergonomics in USA” (in Polish), *Ergonomia*, Vol. 21, No. 1–2, pp. 141–155.
- Karwowski, W., (2005). *Ergonomics and Human Factors: The Paradigms for Science, Engineering, Design, Technology, and Management of Human-Compatible Systems*,” *Ergonomics*, (in press).
- Karwowski, W., & Marras, W. S., Eds. (1999), *The Occupational Ergonomics Handbook*, CRC Press, Boca Raton, FL.
- Koopman-Boyden, P. G., & Macdonald, L. (2003). Ageing, work performance and managing ageing academics. *Journal of Higher Education Policy and Management*, 25(1), 29-40.
- Knodel, J., Chayovan, N., Graisorapong, S. & Suraratdecha, C. (2000). Ageing in Thailand: an overview of formal and informal support”, in Phillips, D.R. (Ed.), *Ageing in Asia-Pacific Regions: Issues, Policies and Future Trends*, Routledge, London.

- Knodel, J., & Chayovan, N. (2008). Population ageing and the well-being of older persons in Thailand: Past trends, current situation and future challenges. UNFPA Thailand and Asia and the Pacific Regional Office.
- Kühn, S., Milasi, S., & Yoon, S. (2018). Population ageing and future labour market challenges. *World Employment and Social Outlook*, 2018(1), 45-50.
- Larkin, J., & Neumann, R. (2009). Older academics and career management: An interdisciplinary discussion. *Australian Journal of Career Development*, 18(3), 29-39.
- Larkin, J., & Neumann, R. (2012). Ageing academics: Workforce priorities for universities. *International Journal of Employment Studies*, 20(1), 3-24.
- Lazazzara, A., & Bombelli, M. C. (2011). HRM practices for an ageing Italian workforce: the role of training. *Journal of European Industrial Training*, 35(8), 808-825.
- Lisenkova, K., Mérette, M., & Wright, R. (2013). Population ageing and the labour market: Modelling size and age-specific effects. *Economic Modelling*, 35(0), 981-989.
- Mahlberg, B., Freund, I., & Prskawetz, A. (2013). Ageing, productivity and wages in Austria: Sector level evidence. *Empirica*, 40(4), 561-584.
- Mathew, A. (2015). Talent management practices in select organizations in India. *Global Business Review*, 16(1), 137-150.
- Martin, D. J. (2018). How are you ageing today? Art, activism and ageing. *Working with Older People*, 22(2), 121-128.
- McMahan, S. (1999). Ergonomic solutions for reducing the risk of CTDs", *American Journal of Health Studies*, Vol. 15 No. 4, pp. 199-205.
- Meaning of Working International Research Team (1987). *The Meaning of Working*, Academic Press, London.
- Medical Outcomes Trust (2002). *SF-12 Health Survey (version 2)*. Lincoln, USA:Quality Metric Incorporated.
- Mitchell, J. (1996). *Stressing Organization culture. Health and well-being in a changing work environment*. Brisbane, Australian Academic Press.
- National Occupational Stress Conference. Brisbane. Australian Academic Press.
- Maimaris, W., Hogan, H., & Lock, K. (2010). The impact of working beyond traditional retirement ages on mental health: implications for public health and welfare policy. *Public Health Reviews*, 32(2), 532-548.
- Mustafa, S. A., Kamaruddin, S., Othman, Z., & Mokhtar, M. (2009). The effect of ergonomics applications in work system on mental health of visual display terminal workers. *European Journal of Scientific Research*, 31(3), 341-354.
- Narknisorn, B., & Kusakabe, K. (2013). Issues challenging future Thai elder care by women and family. *International Journal of Sociology and Social Policy*.
- Nelson, T.D. (2002). *Ageism: Stereotyping and Prejudice Against Older Persons*, MIT Press, Boston, MA.
- Newell, S., Scarbrough, H., Swan, J., Robertson, M., & Galliers, R. D. (2002). The importance of process knowledge for cross project learning: Evidence from a UK hospital. In *Proceedings of the 35th Annual Hawaii International Conference on System Sciences* (pp. 1019-1028). IEEE.
- Nemeth, C. (2004). *Human Factors Methods for Design*. CRC Press, Boca Raton, FL.
- Ng, T. W. H., & Feldman, D. C. (2013). A meta-analysis of the relationships of age and tenure with innovation-related behavior. *Journal of Occupational and Organizational Psychology*, 86, 585-616.

- NRC (National Research Council) (2001), *Musculoskeletal Disorders and the Workplace: Low Back and Upper Extremities*, National Academy Press, Washington, DC.
- OECD (2011), *Pensions at a Glance 2011: Retirement-Income Systems in OECD and G20 countries*, OECD, Paris.
- OECD. (2015). *Labour Force Statistics (LFS) by sex and age (indicators)*. In *OECDStatExtracts* (Ed.). Paris. Retrieved from www.stats.OECD.org
- Penner, R. G. (2002). Legal and institutional impediments to partial retirement and part-time work by older workers.
- Phang, H. (2011). Issues and challenges facing population ageing in Korea: Productivity, economic growth, and old-age income security. *Journal of Comparative Social Welfare*, 27(1), 5162.
- Phillips, D. R., & Chan, A. C. (2002). National policies on ageing and long-term care in the Asia-Pacific: issues and challenges. *Ageing and long-term care: National policies in the Asia-Pacific*, 1-22.
- Population Prospects: The 2008 Revision, United Nations, Department of Economic and Posthumal, R.A. & Campion, M.A. (2009), *Age stereotypes in the workplace: common*
- Prasartkul, P., Thaweessit, S., & Chuanwan, S. (2019). Prospects and contexts of demographic transitions in Thailand. *Journal of Population and Social Studies [JPSS]*, 27(1), 1-22.
- Rasiah, R. (1999). Government-business coordination and the development of Eng Hardware. *Industrial technology development in Malaysia: Industry and firm studies*, 231-246.
- Ployhart, R. E., & Moliterno, T. P. (2011). Emergence of the human capital resource: A multilevel model. *Academy of management review*, 36(1), 127-150.
- Rechel, B., Grundy, E., Robine, J. M., Cylus, J., Mackenbach, J. P., Knai, C., & McKee, M. (2013). Ageing in the European Union. *The Lancet*, 381(9874), 1312-1322.
- Rubin, R.B., Perse, E.M. and Barbato, C.A. (1988). Conceptualization and measurement of interpersonal communication motives”, *Communication Quarterly*, Vol. 40, pp. 305-17.
- Saga (2011). *Rethinking Retirement: An Employers Guide*, April 2011, available at: www.saga.co.uk
- Salthouse, T. A., & Maurer, T. J. (1996). Aging, job performance, and career development. In J. Birren & K. W. Scheie (Eds.), *Handbook of the psychology of aging* (4th ed., pp. 353-364). New York, NY: Academic Press.
- Salvendy, G. (2012). *Handbook of Human Factors and Ergonomics*, John Wiley & Sons, Hoboken, NJ.
- Sanders, M. M., & McCormick, E. J. (1993). *Human Factors in Engineering and Design*, 7th ed., McGraw-Hill, New York.
- Sargeant, M. (Ed.). (2008). *The law on age discrimination in the EU*. Aspen: Kluwer.
- Schröder, H., Flynn, M., Klassen, T., Antoniou, A. S., & Park, M. J. (2016). Population aging and labor market policy in Germany, the United Kingdom, Japan, and the Republic of Korea: the effects of institutional context on old age employment. In *The aging workforce handbook: Individual, organizational, and societal challenges* (pp. 109-134). Emerald Group Publishing Limited.
- Shacklock, K.H. (2008), *Shall I Stay? The Meaning of Working to Older Workers*, VDM Verlag Dr Muller, Saarbrücken.

- Sherer, M., Maddux, J. E., Mercandante, B., Prentice-Dunn, S., Jacobs, B., & Rogers, R. W. (1982). The self-efficacy scale: Construction and validation. *Psychological reports*, 51(2), 663-671.
- Spector, P. E., & Jex, S. M. (1998). Development of four self-report measures of job stressors and strain: Interpersonal Conflict at Work Scale, Organizational Constraints Scale, Quantitative Workload Inventory, and Physical Symptoms Inventory. *Journal of Occupational Health Psychology*, 3(4), 356.
- Stanton, N., Hedge, A., Brookhuis, K., Salas, E., and Hendrick, H. W. (2004). Handbook of Human Factors and Ergonomics Methods, CRC Press, Boca Raton, FL. stereotypes, moderators, and future directions. *Journal of Management*, Vol. 35 No. 1, pp. 158-188.
- Staudinger, U. M., Finkelstein, R., Calvo, E., & Sivaramakrishnan, K. (2016). A global view on the effects of work on health in later life. *The Gerontologist*, 56(Suppl_2), S281-S292.
- Tangchonlatip, K., Chamrathirong, A., & Lucktong, A. (2019). The potential for civic engagement of older persons in the ageing society of Thailand. *Journal of Health Research*.
- Taylor, P., McLoughlin, C., Brooke, E., Di Biase, T. I. A., Steinberg, M., Warburton, J., & Shardlow, S. M. (2013). Managing older workers during a period of tight labour supply. *Ageing and Society*, 33(1), 16.
- Thomas, A. & Pascall-Calitz, J. (2010). Default retirement age-employer qualitative research”, Department for Work and Pensions, Research Report 672.
- Towers Perrin (1991). *Workforce 2000: Competing in a Seller’s Market: A Survey Report on Organizational Responses to Demographic and Labour Force Trends in Canada*, Towers Perrin, Toronto.
- Truxillo, D. M., Cadiz, D. M., & Rineer, J. R. (2014). The aging workforce: Implications for human resource management research and practice. *Oxford Research Reviews Oxford Handbooks Online: Business & Management*. DOI, 10.
- United Nations, Department of Economic and Social Affairs, Population Division (2009). *World* Vicente, K. J. (2004). *The Human Factor*, Routledge, New York.
- Vickerstaff, S. (2006). Entering the retirement zone: how much choice do individuals have?”, *Social Policy and Society*, Vol. 5 No. 4, pp. 507-517.
- Von Nordheim, F. (2004). Responding well to the challenge of an ageing and shrinking workforce. European Union policies in support of member state efforts to retain, reinforce & re-integrate older workers in employment. *Social Policy and Society*, 3(02), 145153.
- Williamson, J. B., & Higo, M. (2009). Why Japanese workers remain in the labor force so long: Lessons for the United States? *Journal of Cross-Cultural Gerontology*, 24(4), 321337.
- World Health Organization (2016). Discrimination and negative attitudes about ageing are bad for your health”, available at: www.who.int/mediacentre/news/releases/2016/discrimination-ageing-youth/en/