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Effect of seniors' work values on their self-skill evaluations: focusing on Japanese seniors

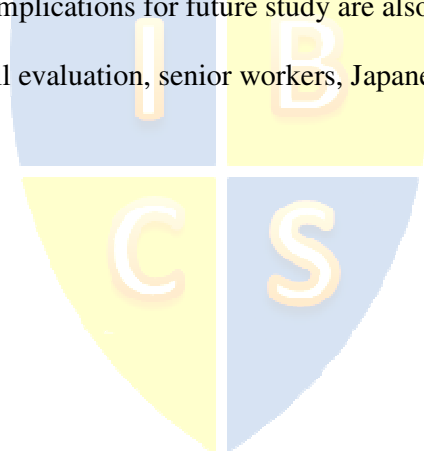
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Abstract

It is important to create a satisfying work environment for senior people in a society with a long life expectancy. This study emphasizes the importance of seniors' self-evaluations of their own skills in order to enhance their task-specific self-esteem, and examines the effect of their work values on their skill evaluations using data collected from 1,200 Japanese people aged 55 years and above. A hierarchical regression analysis revealed that the intrinsic work values of senior people positively influenced their evaluations of problem solving, human relations, and mastery of life skills; furthermore, extrinsic work values had a positive effect on the latter two evaluations even after controlling the effects of some demographic and attitudinal variables. Some implications for future study are also discussed.

Keywords: work values, skill evaluation, senior workers, Japanese study



Introduction

Japan is well known for being a country with one of the world's highest life expectancies. According to the data reported by the Ministry of Health, Labour and Welfare of Japan in 2009, the average lifespan of Japanese people is 79.59 years for men (the fifth highest in the world) and 86.44 years for women (highest in the world). Furthermore, statistical data also show that the birthrate in Japan has been decreasing from 2.05 in 1974 to 1.37 in 2009, which has resulted in serious problems related to attaining a healthy economic growth.

The long lifespan and low birthrate of Japanese people has forced the Japanese government to take various measures to alleviate the negative effects of population change in Japan. For example, the Japanese government enacted the Revised Law for the Stabilization of Employment of the Aged in 2006, which requires companies to gradually raise the retirement age to 65 years.

However, even when seniors are legally guaranteed employment, they do not always experience a happy life. People seek jobs not only because they need to earn a living but also because they wish to gain high self-esteem as competent persons who are appreciated in society. Lopez (1982) argues that self-esteem should be addressed from chronic, task-specific, and social aspects, and empirically found that only task-specific self-esteem significantly moderated the effect of job performance on satisfaction. Furthermore, Gaillard and Desmette (2010) reveal that seniors' attitudes toward early retirement, learning, and development are influenced by how they evaluate themselves through positive or negative stereotypic information about senior people. If seniors earn enough money every day but their work does little to contribute to their self-esteem, they will not be happy, and this in turn will not help establish a desirable aging society.

This study assumed that one effective way to enhance seniors' task-specific self-esteem is to boost their confidence in their work skills, thus portraying seniors as competent workers in their workplaces. If they evaluate the various aspects of their work skills in detail, they can recognize their competency in their workplace, which in turn can enhance their self-esteem.

The question, therefore, is how do we facilitate senior workers to evaluate their own skills in detail? The simplest method might be job trainings to improve their actual skills. In fact, Lee, Czaja, and Sharit (2009) indicate that senior workers desire to receive additional training on technology and prefer classroom-training opportunities, and Charfin and Harlow (2005) show the positive effects of training senior people on the basis of results obtained from the seniors themselves and their organizations. Plimpton (1984) also demonstrates that senior workers' mental capabilities to learn are not necessarily low, contrary to the general assumption that these capabilities diminish with age. However, as is well understood from Lallemand and Rycx (2009), who show that older workers have a negative effect on firm productivity, simply training senior people with no consideration of the psychological factors associated with their self-perception might produce only minimal effects on their skill evaluation and performance.

This study assumed that seniors' skill evaluations would be influenced by their work values, and investigated this relationship using data collected from seniors in Japan. Many past researches have recognized the importance of work values and determined their antecedents and consequences. However, much less research has been conducted specifically on the work values of senior workers and the effects of these work values on various work outcomes. This study hopes to contribute not only to employers who employ senior people and have an interest in how they should be motivated, but also to academic researchers who are considering the employment problems in the current aging society.

SKILL EVALUATIONS

Many researchers have argued that workers, and particularly management employees, require not only technical skills (hard skills) but also interpersonal skills (soft skills) (Deeter-Schmelz, Goebel & Norman, 2008; Margolis, 2007; Morland, 2001; Venkatesh & Wilemon, 1976; Weber, Finley, Crawford & Rivera, 2009). For example, Weber et al. (2009) emphasize the soft skills, in contrast to hard skills, of hospitality management. Some researchers also focus on the importance of training to enhance human relations skills (Cash & Vellema, 1979; Ganzel, 2001; Parker, 1974). However, when focusing on senior workers, another dimension of skill evaluation beyond technical and human relations skills is also necessary.

Katz (1955, 1956) identifies three types of skills: technical, human, and conceptual. Technical and human skills can be plainly explained. Conceptual skills, on the other hand, are more complex and refer to the ability to recognize the interactive relationship between various functions and components in a complete system. They are also related to the visualizing of the future using comprehensive foresight to determine the appropriate direction of an organization. This kind of skill is considered one that seniors possess and is appreciated in society.

In fact, senior workers are expected to behave as psychologically and spiritually mature people in the society. They are expected to have good manners, stable emotions, and strong self-discipline, which results in everyone having a high level of confidence in them. Moreover, their ability to analyze situations in a calm manner is similar to Katz's (1955) conceptual skill. With regard to a desirable characteristic of senior people, Fraser, McKenna, Turpin, Allen, and Liddle (2009) cite the words of an old worker, "[old workers are] not striving to get houses, they're not striving to raise families. They're not striving for power. They're not steady in their thoughts, I'd say" (p. 265). This skill of senior people is also discussed in the Analects of Confucius (a record of the words and acts of a Chinese philosopher, Confucius), which has profound implications on most East Asian people; in particular, the Analects of Confucius indicate that aged, mature people should throw away their hesitation and be able to listen to other people without reserve (Nr. 2, The practice of government).

In this study, this kind of skill was classified as a "mastery of life" skill. Even if a senior person is physically weak or has little cutting-edge technical knowledge, if she/he has well-developed mastery of life skills, acquired through her/his extensive experience, then she/he will be highly respected, particularly in East Asian societies including Japan. Therefore, it is important to include this category of skills with regard to senior people.

How senior people evaluate their own skills is generally related to their attitude toward their job and organization. A low skill evaluation inhibits their expectation of being promoted in an organization and enjoying challenging jobs. Armstrong-Stassen and Ursel (2009) reveal that older workers' job plateauing (the perception of no work or job-responsibility challenges) and hierarchical plateauing (the perception of little possibility of further upward movement within an organization) have a direct or indirect negative impact on their career satisfaction and intention to retain their jobs.

WORK VALUES

People's values play an important role in their behavior, attitude, and motivation in their life. Values are regarded as a complicated system that comprises many specific value components, that is, subsystems. Work values are considered one such subsystem, particularly those associated with judgment toward the desirability of work rewards and the work

environment. Work values are defined as “beliefs about the desirability of specific outcomes of working” (Hattrup, Mueller & Jones, 2007, p. 481), and they “occupy a more central place in a person’s cognitive system and may be more closely linked to motivation” (Fields, 2002, p. 263). Focusing on workers’ work values is crucial when considering effective ways to encourage them to work harder and enjoy their workplaces.

Work values are sometimes classified into several categories; the typical dimensions are extrinsic and intrinsic (Gahan & Abeysekera, 2009; Hegney, Plank & Parker, 2006; Hirschi, 2010; Vansteenkiste et al., 2007). Extrinsic work values are defined as “the traditional pursuit of success by advancing up the organizational hierarchy to achieve prestige, status, and high income” (Watts, 1992, p. 51). In contrast, intrinsic work values are referred to as the “employees’ natural desire to actualize, develop and grow at the work place (i.e. self-development), to build meaningful and satisfying relationships with colleagues (i.e. affiliation) and to help people in need (i.e. community contribution)” (Vansteenkiste et al., 2007, p. 253). Although some researchers adopt the more complicated dimensions of work values, as reviewed by Ueda and Ohzono (2011), extrinsic and intrinsic work values are admitted to be the most basic classification.

Work values have been found to influence various work outcomes. For example, Kiddon (1978) demonstrates that work values, defined as the Protestant Ethic of the worker, have a significant relationship with commitment. Wang, Hyde, and Hsieh (2010) also indicate that work values significantly influence normative commitment and that turnover intention mediates pay satisfaction. In contrast to the almost consistent findings of the positive effect of intrinsic work values on desirable work outcomes, some researchers found that extrinsic work values had no effect on desirable outcomes, or a positive effect on undesirable work outcomes. For example, Vansteenkiste et al. (2007) reveal that extrinsic work values are associated with negative work outcomes (i.e., higher emotional exhaustion, short-lived satisfaction after successful goal attainment, and turnover intention). Hirschi (2010) examines the effects of both extrinsic and intrinsic work values and shows that only the latter are related to positive career development. Moreover, using data collected from Japanese workers, Ueda and Ohzono (2011) also reveal that extrinsic rewards have a negative effect on various work outcomes, while most intrinsic work values almost consistently have positive influences.

Although no research has specifically focused on the relationship between work values and skill evaluation using data from senior people, it would be reasonable to assume that intrinsic work values would positively influence skill evaluations, on the basis of the findings of past research. Intrinsic work values make workers more sensitive toward their own skills and encourage self-development to improve skills. Furthermore, even if workers do not actually have well-developed skills, higher intrinsic work values will encourage workers to evaluate their skills in detail or to evaluate themselves because of self-justification (self-serving) heuristics (Yamazaki, 2011). Therefore, we proposed the following hypothesis concerning the effect of intrinsic work values.

Hypothesis I: Senior workers’ intrinsic work values will have a positive effect on their skill evaluations.

As previously mentioned, some past researches have determined that extrinsic work values do not influence positive work outcomes or have an impact on negative work values. While most intrinsic rewards for workers are related to themselves or their aptitude, extrinsic rewards are associated with things that the workers consider important such as income and status, which is given by a society and organization. Higher extrinsic work values encourage workers to improve their skills to acquire these extrinsic rewards. However, various linkages between skills and extrinsic rewards can be considered. In other words, workers can consider that almost any type of work skill will be finally contributive to the acquisition of extrinsic rewards. Workers with higher extrinsic work values are more sensitive to their different skills

and want to improve them. On the other hand, owing to self-justification heuristics, they tend to believe that they have the appropriate skills to acquire these extrinsic rewards. Therefore, the following hypothesis regarding the effect of extrinsic work values was proposed.

Hypothesis II: Senior workers' extrinsic work values will have a positive effect on their skill evaluations.

METHOD

Sample

This study utilized the data from “the survey of reality of employment of senior people” that was originally collected by the Works Institute Recruit Co., Ltd. (hereafter, referred to as WIR) in Japan. The WIR offered this database to the Social Science Japan Data Archive, Center for Social Research and Data Archives, Institute of Social Science, The University of Tokyo, to allow permitted academic researchers to access the data. The data were collected from 1,200 male seniors living in the Tokyo metropolitan area in September 2005. Their ages were between 55 and 74 years. Of the total number of participants, 675 were employed while 525 were not.

Measures

Work skill evaluation. Problem solving skills were associated with skills regarding adequate decision making, and the problem solving skills evaluation was measured with a 5-item scale ($\alpha = 0.920$). We preferred using the phrase “problem solving skill” rather than “technical skill” because various senior people were included in the sample, and it is difficult to specify the concrete technical skills necessary in their varied jobs. Furthermore, problem solving could be considered a universal technical skill for almost all work situations. The exemplary items in problem solving skills were “the skill to collect adequate cases and information” and “the skill to design appropriate solutions.” Human relations skills referred to those required in confidential interpersonal relationships with others in order to enhance job performance. The human relations skills evaluation was measured with a 7-item scale ($\alpha = 0.902$). The exemplary items were “the skill to make a good first impression” and “the skill to develop confidential relationships with others.” Finally, mastery of life skills implied those skills related to having undisturbed sensibilities and stable emotions when dealing with crises. The mastery of life skills evaluation was also measured with a 7-item scale ($\alpha = 0.869$). “The skill to stabilize my emotions” and “the skill to view anything optimistically” were typical examples of this category. All items were evaluated using a regular 4-point scale ranging from 1 (have little) to 4 (have enough). All the items of work skill evaluations are shown in Table 1 (Appendix).

Work values. Work values were measured with items that questioned the degree of importance of various work aspects. The extrinsic work values were measured with a 6-item scale ($\alpha = 0.744$). The exemplary items were “to earn a high income” and “to have a title and good status.” The intrinsic work values were measured with an 8-item scale ($\alpha = 0.780$). “To improve a society” and “to work with coworkers” were examples of intrinsic work values. All items were evaluated using a regular 4-point scale ranging from 1 (not very important) to 4 (very important). Table 2 (Appendix) shows all the items of work values.

We also considered the necessity of controlling the effect of the following demographic and attitudinal factors on skill evaluations.

Age. Actual ages were requested and utilized.

Annual income by job. Annual income except for retirement pay and pensions was measured with a 9-point scale ranging from (1) “under 600 thousand yen” to (9) “over 6 million yen.”

Academic record. Academic record was measured with an ordinal scale from (1) “elementary school or junior high school graduation” to (4) “university and graduate school graduation.”

Life satisfaction. Life satisfaction was measured by two items. The first was associated with overall life satisfaction, and the second was related to life satisfaction from an economic standpoint. Each of them was measured with a 4-point scale ranging from 1 (no satisfaction) to 4 (much satisfaction). (Despite having only two items, the reliability was relatively high ($\alpha = 0.779$).

Job satisfaction. Job satisfaction was measured with only one simple item: “how satisfied are you with your current job?” A 4-point scale ranging from 1 (no satisfaction) to 4 (much satisfaction) was used.

RESULTS

Basic Statistics

Table 3 (Appendix) shows the means, standard deviations, reliabilities (Cronbach’s alphas), and inter-correlations regarding variables. A significantly negative correlation of age with annual income by job ($\gamma = -0.463$, $p < 0.01$) was as expected, but despite this negative relationship, the positive correlation of age with life satisfaction ($\gamma = 0.117$, $p < 0.01$) was surprising. Annual income by job had significantly positive correlations with life satisfaction ($\gamma = 0.142$, $p < 0.01$) and job satisfaction ($\gamma = 0.176$, $p < 0.01$). These relationships were also as expected. The correlations among the three skill evaluations were considerably high ($\gamma = 0.747, 0.758, 0.760$, $p < 0.01$), implying that skills are highly interrelated with each other.

Result of the Hierarchical Regression Analysis

Table 4 (Appendix) shows the results of the hierarchical regression analysis. In this study, the age, academic record, and annual income by job—as the demographic factors—and two satisfaction variables—as the attitudinal factors—were first compulsorily entered into the equation to control their effect. Next, the extrinsic and intrinsic work values were compulsorily entered into the equation to examine whether these values would have a further significant effect on skill evaluations after controlling the demographic and attitudinal factors. Because the data on job satisfaction and annual income by job were obtained only from seniors who were employed, the sample size decreased from 1,200 to 675.

According to the statistics in Table 4, all incremental F-values from Models 2 to 3 were significant for all the three dependent variables, which shows that the consideration of the effect of these work values as independent variables was important. In particular, the intrinsic work values had a significantly positive effect on the evaluation of problem solving skills ($\beta = 0.302$, $p < 0.01$), human relations skills ($\beta = 0.313$, $p < 0.01$), and mastery of life skills ($\beta = 0.269$, $p < 0.01$). This result supported Hypothesis I. In contrast, only two of the three effects of extrinsic work values were as hypothesized. Although the extrinsic work values had no significant impact on problem solving skill evaluation ($\beta = 0.028$, n.s.), they had a significantly positive impact on the evaluations of human relations skills ($\beta = 0.104$, $p < 0.05$) and mastery of life skills ($\beta = 0.106$, $p < 0.05$). Therefore, Hypothesis II was also supported for those two skill evaluations but not for problem solving skills.

DISCUSSION AND CONCLUSION

This study revealed the effect of seniors' work values on their skill evaluations using data collected from senior workers living in Japan. The results show that intrinsic work values positively influenced all three skill evaluations, and extrinsic work values had a significantly positive impact on two of the three skills.

An unexpected finding was the insignificant effect of extrinsic work values on the problem solving skill evaluation. This might have occurred because many seniors feel that they are expected to play significant roles in the social context, rather than be technical experts in an organization. They might as well realize that being an expert in dealing with interpersonal relationships is one of the shortest and most effective methods of gaining the extrinsic rewards in which they are interested.

This study might be somewhat exceptional in that it showed the positive effect of extrinsic work values on skill evaluations. This finding is important because it demonstrates that, regardless of the type of work values, senior people who have high work values can increase their skill evaluations and, in turn, increase their task-based self-esteem.

However, despite the importance of the research topic, we admit that this study has some limitations. First, it considered simple extrinsic and intrinsic work values. Although this classification is typical among researchers who address work values, other researchers have dealt with more complicated dimensions of these values, as reviewed by Ueda & Ohzono (2011). In particular, seniors' general values might be different from those of younger employees, reflecting their extensive experience in society. Deeper investigation is needed to examine whether a simple dichotomization, such as extrinsic and intrinsic, is truly effective with regard to senior workers' conditions. Second, seniors' skills and their evaluations of these skills should also be improved. In this study, we included mastery of life skills to the traditional technical and human relations aspects of skills. However, a more sophisticated method should be adopted to determine what skills could be linked with work values if using a sample of seniors. Third, the study data were collected in the summer of 2005. In addition to the fact that the Law for the Stabilization of Employment of the Aged was revised in 2006, the annual income of Japanese people has been decreasing since 2005 (average yearly income of business persons decreased from 4.37 million yen in 2005 to 4.06 million yen in 2009). These institutional and economic changes might have altered the seniors' values and perceptions of their skills. It is unclear whether the same result would be acquired if using the latest data on senior Japanese people. Finally, although our hypotheses were not developed in consideration of the effect of a specific national culture, it is unclear whether the findings of this study, particularly the positive effect of extrinsic work values on skill evaluations, are similarly observed globally regardless of cultural differences, or whether they are specific to Japan's unique work environments. This theme concerning the moderating effect of national cultures should be investigated in future studies.

Although this might be a preliminary study, it has several important implications for both employers and academic researchers. Employers are interested in motivating senior workers at workplaces. Japanese society has almost always considered intrinsic work values a necessary virtue for mature people, and has sometimes scorned seniors who have strong extrinsic work values because being humble is virtues in this society. However, the findings of the positive effect of extrinsic work on the factors related to self-esteem should encourage employers to consider effective methods of enhancing the extrinsic and intrinsic work values of senior workers to improve their performance in organizations. Furthermore, although work values have been recognized as an important topic in organizational studies, past researchers have paid little attention to the work values of senior people, who are prone to losing confidence in their necessity in society. Considering the positive effect of work values on

work outcomes, researchers should direct more attention toward seniors' work values than previously devoted to this topic, and search for important findings to contribute to an aging society.

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APPENDIX

Table 1. Items of Skill Evaluations

Problem Solving Skills ($\alpha = 0.920$)
The skill to collect adequate cases and information
The skill to resolve a problem
The skill to design appropriate solutions
The skill to decide on a goal
The skill to develop an action plan
Human Relations Skills ($\alpha = 0.902$)
The skill to make a good first impression
The skill to build confidential relationships with others
The skill to understand the true meaning of others' remarks
The skill to work cooperatively with anyone
The skill to lead many people
The skill to persuade others
The skill to cheer or help others
Master of Life Skills ($\alpha = 0.869$)
The skill to stabilize my emotions
The skill to not give up easily
The skill to accomplish what I decided to do and see it through to the end
The skill to establish good habits
The skill to view anything optimistically
The skill to motivate myself
The skill to work with joy and relax

Table 2. Items of Extrinsic and Intrinsic Work Values

Extrinsic Work Values ($\alpha = 0.744$)
To utilize my abilities
To earn a high income
To work in a comfortable environment
To have a title or good status
To remove the uncertainty about the future
To be appreciated for performance
Intrinsic Work Values ($\alpha = 0.780$)
To engage in a job I like
To meet others
To improve society
To be praised for my knowledge and skills
To mature professionally
To work outside
To work with coworkers
To help others in need

Table 3. Means, Standard Deviations, Reliabilities, and Intercorrelations of Variables

Variables	Means	Std Dev	N	1	2	3	4
1 age	64.540	5.807	1,200	—			
2 academic record	2.600	1.111	1,195	-.173**	—		
3 annual income by job	6.770	2.687	675	-.463**	.217**	—	
4 life satisfaction	2.705	.581	1,200	.117**	.124**	.142**	(.779)
5 job satisfaction	2.796	.680	675	.059	.051	.176**	.523**
6 extrinsic work values	2.621	.539	1,197	-.097**	.021	.090*	.047
7 intrinsic work values	2.617	.524	1,193	.057	-.019	-.074	.095**
8 problem solving skills	2.504	.650	1,199	-.052	.304**	.131**	.204**
9 human relations skills	2.460	.577	1,196	-.041	.231**	.067	.217**
10 mastery of life skills	2.519	.538	1,196	-.019	.172**	.064	.185**

** : $p < 0.01$, * : $p < 0.05$; Reliabilities are within parentheses

Variables	5	6	7	8	9	10
1 age						
2 academic record						
3 annual income by job						
4 life satisfaction						
5 job satisfaction	—					
6 extrinsic work values	.093*	(.744)				
7 intrinsic work values	.088*	.642**	(.780)			
8 problem solving skills	.206**	.258**	.344**	(.920)		
9 human relations skills	.219**	.318**	.411**	.758**	(.902)	
10 mastery of life skills	.200**	.306**	.397**	.747**	.760**	(.869)

Table 4. Results of Hierarchical Regression Analysis

Models		Problem Solving Skills Evaluation			Human Relation Skills Evaluation		
		beta	ΔR^2	ΔF	beta	ΔR^2	ΔF
1	age	.066			.025		
	academic record	.275 ***			.199 ***		
	annual income by job	.102 **	0.085	21.673***	.038	0.042	9.774***
2	age	.021			-.036		
	academic record	.259 ***			.177 ***		
	annual income by job	.047			-.033		
	life satisfaction	.098 **			.163 ***		
	job satisfaction	.130 ***	0.037	13.915***	.133 ***	0.061	22.565***
3	age	.015			-.034		
	academic record	.278 ***			.199 ***		
	annual income by job	.066 *			-.014		
	life satisfaction	.086 **			.148 ***		
	job satisfaction	.102 **			.097 **		
	intrinsic work values	.302 ***			.313 ***		
	extrinsic work values	.028	0.101	43.298***	.104 **	0.147	65.129***

***: $p < 0.01$, **: $p < 0.05$, *: $p < 0.1$

Models		Master of Life Skills Evaluation		
		beta	ΔR^2	ΔF
1	age	.045		
	academic record	.155 ***		
	annual income by job	.052	0.027	6.189***
2	age	-.007		
	academic record	.134 ***		
	annual income by job	-.011		
	life satisfaction	.132 ***		
	job satisfaction	.129 ***	0.048	17.035***
3	age	-.004		
	academic record	.152 ***		
	annual income by job	.005		
	life satisfaction	.120 ***		
	job satisfaction	.097 **		
	intrinsic work values	.269 ***		
	extrinsic work values	.106 **	0.118	48.305***