

The Impact of Job Autonomy, Psychological Empowerment, and Japanese-Style Management on Work Performance and Organizational Commitment

by

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Abstract

Currently, Japan's working-age population is on the decline, and the productivity of its current workforce is said to be the worst among all G7 countries. Therefore, Japanese company workers are under pressure to find ways to efficiently increase their performance. However, simply requiring workers to improve threatens their sense of belonging and allegiance. In order to combat this, there is a need for companies to find ways to increase organizational commitment. In this paper, we introduce eight hypotheses based on factors believed to affect work performance and organizational commitment (e.g., job autonomy and psychological empowerment) and unique aspects of Japanese management styles, including the seniority wage system and lifetime employment. Data from surveys were used to conduct a multiple regression analysis to test these hypotheses. As a result of these analyses, it became clear that job autonomy has an effect on work performance, psychological empowerment has effects on both organizational commitment and work performance, lifetime employment does not affect organizational commitment or work performance, and the seniority wage system has a positive effect on organizational commitment but a negative effect on work performance.

Keywords

Job autonomy; Psychological empowerment; Japanese-style management; Seniority wage system; Long-life employment; Work performance; Organizational commitment; Regression analysis; Human resource management; IT industry

Introduction

The working-age population of Japan continues to fall, leading companies to focus hard on improving efficiency and elevating workforce performance. The term "performance" is used in a variety of fields; there is no single definition for it. However, it is often used to express the process followed to achieve results or outcomes. Performance applies to the academic world and to the world of work. Increasing the performance and maintaining a high level over time are very important topics for both for-profit and not-for-profit management teams.

In the field of human resources management, work performance is defined slightly differently by various researchers. Campbell, McHenry and Wise(1990) defined performance as "observable things people do (i.e., behaviors) that are relevant for the goals of the organization"(p.314). However, Viswesvaran and Ones (2000) insisted that work performance referred to "scalable actions, behaviors, and outcomes that

employees engage in or bring about that are linked with and contribute to organizational goals"(p.216). The first definition does not refer to outcomes, but the second one does. These perspectives create different problem scopes. For the purpose of this research, work performance is defined as behaviors and outcomes that are relevant to the goals of an organization.

According to the calculations of the Japan Productivity Center (JPC), who used an Organization for Economic Co-operation and Development dataset, Japan's labor productivity rate is 46 USD per hour, which is two-thirds that of the US. Japan's rate is the lowest among all G7 countries. The JPC have also proven that Japan's labor productivity rate has not changed since 1980 (JPC, 2017). With this low productivity rate, Japan's unique management style, which differs from that of the US and Europe, has reduced labor mobility and contributed to a culture of long working hours and low rates of paid leaves

(AAE Travel Pte. Ltd., 2017). This led to a lack of work-life balance and is now posing a serious problem for the Japanese society. In recent years, the need to change this situation has been discussed, leading to the Japanese government introducing “Work Style Reform” into its policy goals. With this, Japan embarked on measures to reduce the long working hours. For companies to increase value (e.g., labor productivity), work performance is most important. However, as work performance increases and productivity rises, employees’ jobs will not become more relaxed, leading to harm their sense of belonging and satisfaction with their company and career. In order to solve this problem, it is essential for managers to find ways of increasing organizational commitment as they push work performance.

Since the 1970s, organizational commitment has been recognized as a key concept of organizational research. This term has been defined in several different ways (Angle & Perry, 1981; Bozlagan, Dogan & Daoudov, 2010; Gautam, Van Dick & Wagner, 2004; Porter, Steers, Mowday & Boulian, 1974). Porter et al. (1974) defined organizational commitment as “the strength of an individual’s identification with and involvement in a particular organization”(p.604). According to Salancik (1977), organizational commitment means “a state of being in which an individual becomes bound by his actions and through these actions to beliefs that sustain the activities and his own involvement”(p.62). Later, Allen & Meyer (1990) described organizational commitment as “a psychological state that binds the individual to the organization”(p.14). More recently, Cohen (2003) argued that “commitment is a force that binds an individual to a course of action of relevance to one or more targets”. From these few definitions, it is clear that the concept of organizational commitment refers to unifying both the employee’s and the company’s goals and values (Hall, Schneider & Nygren 1970). This creates a sense of belonging and attachment that the employee needs to feel toward his/her organization.

Japanese companies must consider methods of increasing both performance and commitment within the context of the Japanese management style. This paper does so and focuses on job autonomy and organizational empowerment, using past research examples to clarify how the two are related. In this paper, we review surveys undertaken by employees in the information technology (IT) industry, because this industry is known to have longer working hours per year than the average of all other industries (19.7

extra hours per month) (MHLW, 2015). While those extra hours have decreased compared to 10 or 20 years ago, there is still room for improvement.

With software development, there is a need to design systems and develop programs suited to the customer’s specifications within a designated timeframe. Experience and know-how are essential to achieving this. This drive leads IT company workers to stay at work longer and to work harder to gain essential experience and skills. Furthermore, IT companies often work for other companies, meaning that additional time must be spent in collaboration, leaving less time for actual work. The aim of this research is to identify clear ways to increase both employee performance and commitment and should contribute to solving human resources problems in the IT industry.

Literature Review and Hypotheses

Job Autonomy

The term “autonomy” is used in many academic disciplines. The origin of this word can be traced back to the Greek “autos,” meaning self, and “nomos,” meaning law or rule. This word was first used to express how the Greek city-states created and maintained their laws and autonomous governments (Agich, 2014; de Jonge, 1995; Kühler & Jelinek, 2014). In the field of politics, autonomy is said to be “the ability to participate in the making of collective decisions” (Przeworski, 2003, p.265). In psychology, according to Ryan, Deci and Vansteenkiste (2015), autonomy is defined as “self-regulation and integration in acting”(p.385). From the viewpoint of pedagogy, Little(1991) stated that “Essentially, autonomy is a capacity - for detachment, critical reflection, decision-making, and independent action”(p.4). In the area of human resources management, job autonomy is defined as “the degree to which a job provides substantial freedom, independence, and discretion to the individual for scheduling work and determining the procedures to be used in carrying it out” (Hackman & Oldham, 1975, p.162). These definitions were created on the basis of individual research fields and are, therefore, different. However, all definitions reflect the idea that autonomy is a freedom in which one is allowed to make some independent decisions.

A significant amount of prior research has shown that job or work autonomy has had a positive impact on organizational commitment (Langfred & Moye, 2004). When Sisodia and Das (2013) compared

the effects of organizational commitment across two groups (i.e., high and low job autonomy), they found that the high job autonomy group had higher commitment than that of the lower group. In the workplace, those who have the freedom to plan and undertake their work as they please have greater attachment to and feel a greater sense of unity within their workplace compared to those that work under strict guidance and management controls. This concern has been experienced by many business people and demonstrates a causal relationship that can be easily theoretically understood.

According to the research of Beckmann (2016), working-time autonomy can improve employees' productivity and performance. Saragih (2011) proved that, among sales people, high job autonomy was a predictor of high work performance and greater satisfaction. Leveraging the above propositions, two hypotheses can be made:

- H1. Job autonomy has a positive impact on commitment.
- H2. Job autonomy has a positive impact on performance.

Psychological empowerment

The term "empowerment" has been used in various fields, such as medicine, public hygiene, welfare, social studies, and psychology, as well as in management. However, like most terms, it has many definitions. According to Brymer (1991), empowerment is "the process of decentralizing decision-making in an organization"(p.59). However, Randolph (1995) stated that "empowerment is not just giving people the power to make decisions... at its most practical level, empowerment is recognizing and releasing into the organization the power that people already have in their wealth of useful knowledge and internal motivation"(p.20). It has also been noted that differences in people and context including organizational culture and management styles, contribute to the difficulty of deciding on a general definition (Rappaport, 1984; Zimmerman, 1990). The common factors in each include the fact that empowering employees refers to allowing discretionary work behaviors and the right to make decisions independently. Focus is placed on transferring the authority from the upper management to subordinate employees (Baird & Wang, 2010).

Empowerment promotes productivity improvement by making it possible to distribute power within an

organization and to increase the work satisfaction and performance of the employees (Nykodym, Simonetti, Nielsen & Welling, 1994). Unlike non-empowered employees, those given the authority to make decisions have the opportunity to improve their decision-making skills over time. This increases the attainment of individual outcomes. By looking at past human resources management research, it is clear that psychological empowerment has a positive effect on managerial effectiveness (Spreitzer, 1995), and individual performance (Fong & Snape, 2015). Seibert, Silver and Randolph (2004) analyzed data from 301 employees (i.e., engineers) from a Fortune 100 manufacturer of high-technology goods located in the US, and they found that psychological empowerment was significantly positively related to individual performance.

It has been shown in copious research that psychological empowerment positively relates to organizational commitment (Chen & Chen, 2008; Dee, Henkin & Duemer, 2003; Joo & Shim, 2010; Kanter, 1984). Rawat (2011) analyzed the results of surveys undertaken by 133 professionals in the service industry and found that psychological empowerment and commitment had a statistically significant relationship. Liden, Wayne and Sparrowe (2000) found that psychological empowerment effectively increased organizational commitment and work performance. Leveraging the above propositions, it is possible to make the following hypotheses:

- H3. Psychological empowerment has a positive effect on organizational commitment.
- H4. Psychological empowerment has a positive effect on work performance.

Japanese-style management

Seniority wage system. The seniority wage system, similar to lifetime employment, comprises an important element of the Japanese management style. The seniority wage effect causes employees' pay to increase with age and company tenure (Genda & Rebick, 2000; Sugimoto, 2010). This system was widely adopted during the high economic growth period in Japan between 1955 and 1973. Then, many companies faced labor shortages, and this system was implemented to deter employees from changing companies. Additionally, employees who gain seniority at a company are likely to gain important skills and knowledge unique to their company. This was a set of traits prized by Japanese firms at the time. From the employee's perspective, this system

resulted in guaranteed financial stability and was easily adopted. Owing to these facts, company work was made more appealing, labor shortages were filled, and employees' skills increased over the years (Ando, 2015; Conrad, 2010; MHLW, 2013).

In the 1990s, the bubble economy burst, and a long period of economic stagnation continued for 20 years. Thus, companies faced a growing need to reduce costs. As Japanese companies became more globalized, it became understood that a performance-based pay system is more logical and efficient than the seniority wage system. This led many companies to move away from those legacy systems. While this trend gained traction across the nation, concerns regarding long-term employee retention and training again arose, leading some companies to revert. According to the latest reliable survey (Small and Medium Enterprise Agency, 2009), approximately 38% of Japanese companies still use the seniority-based pay system (excluding firms of less than 20 people). It is clear that this seniority-based pay system increases employees' sense of belonging to the organization, increases long-term employee retention, and contributes to high organizational performance. Therefore, the following hypotheses can be made:

- H5. The seniority wage system has a positive impact on organizational commitment.
- H6. The seniority wage system has a positive impact on work performance.

Lifetime employment. Lifetime employment is defined as the practice of being allowed to work until the mandatory retirement age of 60 years, as long as one passes his/her company entrance exam after graduating from high school or university (Hamaaki, Hori, Maeda & Murata, 2010, 2011; Lincoln, 1999; Kodama, 2015; Sullivan & Peterson, 1991). Lifetime employment was first recognized as one of the three unique features of Japanese companies. The other two were seniority-based wages and promotion and an enterprise union (Abegglen, 1958). Lifetime employment is also one of the most important aspects of the Japanese management style. It first appeared in the 20th century when factories were modernizing. Due to the fact that it took time to train workers to operate new machinery, companies began offering them lifetime employment. During the rapid post-World War II growth period (i.e., 1950s to 1970s), lifetime employment became a common practice in large corporations (MHLW, 2013; Moriguchi, 2014). By receiving guaranteed employment and pay, the

employees developed a high sense of loyalty and worked hard. This relationship was accepted as beneficial by the vast majority of companies and employees at the time (Clark & Ogawa, 1996).

Lifetime employment was beneficial because it made it easy for masters of trade to mentor new hires while allowing for long-term training and the sustainment of a sense of unity within the organization. However, this system made it difficult for companies to adapt to changing economic conditions, and it stifled new ideas and creativity, creating a culture where employees became too dependent. Nonetheless, until the mid-1980s, the merits outweighed the demerits in the eyes of most Japanese company leaders (JIL, 2010).

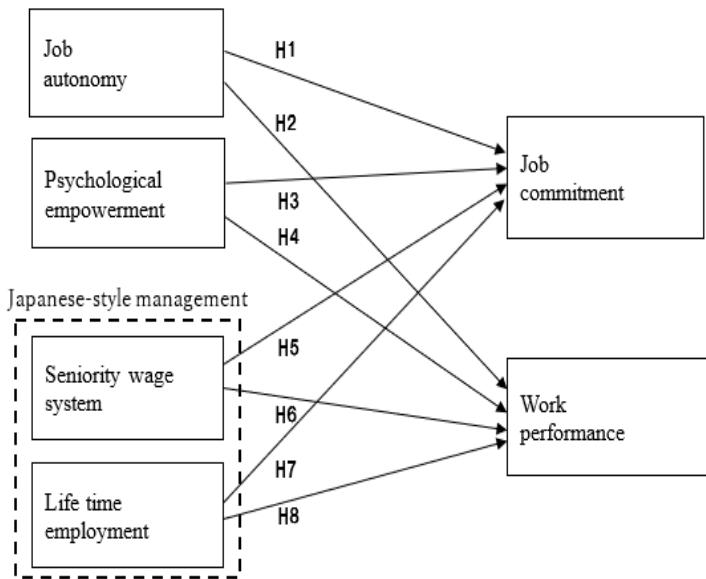
After the economic bubble burst in 1992, Japan entered a long period of economic stagnation, and companies that had adopted lifetime employment were faced with a surplus of labor, leading to difficulty in maintaining the status quo. As a result, in the 2000s and beyond, employees started leaving their jobs before their retirement age to work for other companies. The number of people doing this in Japan is still far lower than in other countries. According to an international comparative analysis conducted by the Japanese Ministry of Health, Labour and Welfare (MHLW) (2010–2012), the percentage of male employees in Japan aged 25–54 who stayed at a single company for more than 10 years was higher than 50%. This is significantly higher than in countries like Germany, France, and Italy and is also higher than in the US, Canada, and the UK, which averaged around 30% (MHLW, 2013).

While this data proves that the number of people working for an extended period at one company remains higher in Japan compared to other countries, there are still the other 50% who changed their jobs within 10 years. Thus, a relatively large number of people changed their jobs, regardless of lifetime employment. From the above information, it became clear that lifetime employment strengthens the relationship between the employee and the organization and contributes to increasing the performance of the organization as a whole. Therefore, despite the limitations, the following hypotheses can be made:

- H7. Lifetime employment has a positive effect on organizational commitment.
- H8. Lifetime employment has a positive effect on work performance.

Figure 1 represents a research model created using the above eight hypotheses.

Figure 1. Research model and hypotheses



Methodology

Research design

In order to test the hypotheses, a questionnaire was created and sent to respondents over the Internet. Regarding organizational commitment, work performance, job autonomy, and psychological empowerment, questions that were previously used in human resources research were used again. However, for Japanese-style management issues, new questions were created. Respondents were asked to respond on a five-point Likert scale (from 1 [strongly disagree] to 5 [strongly agree]), and the Statistical Package for the Social Sciences software v.25 (IBM Corp., Armonk, NY, USA) was used to analyze and test the hypotheses.

For work performance, six items were used, as developed by Kuvaas (2006), including “I often perform better than what can be expected of me” and “I try to work as hard as possible.” For organizational commitment, questions were separated into three types, as defined by Allen and Meyer. These types are affective commitment (the emotional desire to remain in one’s organization), continuous commitment (the costs of leaving the organization), and normative commitment (the sense of obligation or duty to stay) (Allen & Meyer, 1990; Meyer & Allen, 1991). Within these types, the most important was affective commitment, referred to as the essence of commitment (Đorđević, 2004; Mercurio, 2015).

Hence, four questions were selected from the affective commitment scale items (Allen & Meyer 1990). Sample items include “I would be very happy to spend the rest of my career with this organization,” “I enjoy discussing my organization with outside people,” and “I really feel as if this organization’s problems are my own.”

For job autonomy, nine items developed by Breaugh (1985, 1999) were adopted. These items include “I am allowed to decide how to go about getting my job done.” For the psychological empowerment index, four items from Cyboran (2005) were used. These questions were designed to discover how much authority the respondent has at his/her job. The four items are based on the concepts of meaning, competence, self-determination, and impact. The question types include meaning (“This work I do is very important”) and self-determination (“I can decide on my own how to go about doing my work”).

The reliability of variables

The reliability of variables was measured using Cronbach’s alpha. If the value is 0.70 and above, the items are reliable (Nunnally, 1978). According to Table 1, Cronbach’s alpha was higher than 0.7 for all four variables (i.e., job autonomy, psychological empowerment, organizational commitment, and work performance).

Table 1. Reliability Analysis Using Cronbach’s Alpha.

Variable	Cronbach’s alpha	Cronbach’s alpha based on standardized items	Mean	No. of items	Adapted from
Job autonomy	0.918	0.919	3.269	9	Breaugh (1999)
Psychological empowerment	0.768	0.773	3.345	4	Cyboran (2005)
Job commitment	0.730	0.730	2.969	4	Allen and Meyer (1990)
Work performance	0.862	0.863	3.288	6	Kuvaas (2006)

Therefore, the variables were considered reliable. For Japanese-style management, two questions about the seniority wage system and lifetime employment were developed by the author of this paper: “My company has a seniority-based wage system” (seniority wage system) and “At my company, I am employed for life and can work there until I retire” (lifetime employment).

Demographic characteristics of respondents

The characteristics of the 171 valid responses are shown in Table 2. With regard to gender, 81.9% of the responses were from men and 18.1% were from women. Regarding company size, in accordance with the Small and Medium-sized Enterprise (SME) Basic Act, companies with 100 or more employees are referred to as large enterprises, whereas companies with 99 or fewer employees are referred to as SMEs. A large proportion of responses (62.6%) were from those working at large enterprises. Regarding the years of employment, 27.5% of the responses were from employees who have been working at their current company for less than five years. However, 18.7% reported working at their company for 16–20 years. Employees who have been working at their company for more than 16 years comprised 37.5% of the respondents.

Table 2. Demographic Profile of the Respondents (N= 171).

Variable	Category	N	%
Gender	Male	140	81.9%
	Female	31	18.1%
Company size	SME	64	37.4%
	Large enterprise	107	62.6%
Years of employment	<5	47	27.5%
	6–10	30	17.5%
	11–15	30	17.5%
	16–20	32	18.7%
	21–25	22	12.9%
	26–30	9	5.3%
	>31	1	0.6%

Note. SME has 99 or fewer employees, whereas large enterprise has 100 employees or more according to the definition (IT industry) of the SME Basic Law in Japan.

Results and Discussion

Table 3 shows the results of a multiple regression analysis, with organizational commitment as the dependent variable and job autonomy, psychological empowerment, seniority-based wage system, and

lifetime employment as the independent variables. Control variables were set as gender, company size, and years of employment. The variance inflation factor (VIF) of the independent variables and controlled variables was under 2.0, ruling out multi-collinearity issues.

From the analysis results, it is clear that the two factors (i.e., psychological empowerment, and seniority-based wage system) exerted a significant effect on organizational commitment at the 5% level. However, there was no proof that job autonomy and lifetime employment have significant effects. Thus, 35.8% of the total variance can be explained by this regression model. Therefore, it is clear that H3, and H5 are supported, but H1, and H7 are not.

Table 3. Multiple Regression Analysis (dependent variable: organizational commitment).

	β	t	Sig.	VIF
(Constant)		1.828	0.069	
<u>Control variables</u>				
Gender (female: 0, male: 1)	-0.126	-1.973	0.050	1.072
Company size	-0.119	-1.835	0.068	1.118
Years of employment	0.087	1.325	0.187	1.145
<u>Independent variables</u>				
Job autonomy	0.115	1.369	0.173	1.881
Psychological empowerment	0.473	5.762	0.000	1.783
Seniority-based wage system	0.205	3.136	0.002	1.134
Lifetime employment	0.093	1.330	0.185	1.292
F		14.537***		
R-square			0.384	
Adjusted R-square			0.358	

***p < 0.001.

Table 4 shows the results of a multiple regression analysis, with work performance as the dependent variable and job autonomy, psychological empowerment, seniority-based wage system, and lifetime

employment as the independent variables. As with the previous analysis, gender, age, company size, and years of employment were the control variables. The VIF of the independent variables and controlled variables was under 2.0, ruling out multi-collinearity issues.

From the analysis results, it is clear that the independent variables (i.e., job autonomy, psychological empowerment, and the seniority-based wage system) had a significant positive effect on work performance at a level of 5%. Moreover, it was proved that the seniority-based wage system negatively affects work performance. Thus, the practice of increasing the pay according to the number of years worked manages to decrease employees' performance. Therefore, it is more effective to increase the pay according to performance, rather than according to the number of years worked. However, lifetime employment did not have a significant effect on work performance.

As the adjusted *R*-squared was 0.382, the multiple regression model explains 38.2% of the total variance in the data. From these results, it was found that H2, and H4 are supported, but H6, and H8 are not.

Table 4. Multiple Regression Analysis (dependent variable: work performance).

	<i>β</i>	<i>t</i>	Sig.	VIF
(Constant)		6.893	0.000	
<u>Control variables</u>				
Gender (female: 0, male: 1)	-0.135	-2.157	0.032	1.072
Company size	0.083	1.297	0.196	1.118
Years of employment	0.047	0.726	0.469	1.145
<u>Independent variables</u>				
Job autonomy	0.218	2.631	0.009	1.881
Psychological empowerment	0.433	5.371	0.000	1.783
Seniority-based wage system	-0.156	-2.425	0.016	1.134
Lifetime employment	-0.017	-0.244	0.808	1.292
F		15.989***		
<i>R</i> -square		0.407		
Adjusted <i>R</i> -square		0.382		

****p* < 0.001.

Conclusion

Japanese companies are now facing the need not only to increase employee performance, but also to encourage greater organizational commitment. The purpose of this research was to determine the factors affecting organizational commitment and work performance in Japanese companies. Autonomy, psychological empowerment, seniority-based wage system, and lifetime employment were considered. It is clear from the study that job autonomy had a positive effect on work performance, whereas psychological empowerment had a positive effect on both organizational commitment and work performance. Additionally, the seniority-based wage system had a positive effect on organizational commitment, but it had a negative impact on work performance. This system proved useful for encouraging attachment and a sense of belonging to a company, but it did not result in increased work performance. Moreover, it was shown to have a negative effect. Finally, lifetime employment did not have a significant effect on organizational commitment or work performance.

Currently, many industries in Japan are suffering from labor shortages, especially the IT industry, which is facing a significant shortage of engineers. The concept of employees having the freedom to switch from their companies to others offering better working conditions or pay is gaining traction. The numbers of midcareer recruiters and employment agencies are also increasing. Therefore, it is apparent that employees today value performance-based pay more than lifetime employment, and the system of lifetime employment is less relevant and appealing than it was in the past. Future research and analysis should focus on employees' opinions regarding performance-based pay and job switching.

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