

[Research materials]

***Hatarakigai* of Japanese School Teachers: A Structural Equation Modeling Analysis**

MINO Yosuke¹, YOSHIDA Kaori², MITSUTAKE Takahiko³

¹Department of Infant Education, Aomori Chuo Junior College, Aomori Japan, ²Faculty of Health Sciences, Japan Health Care College, Hokkaido Japan, ³Department of Life Design, Hachinohe Gakuin Junior College, Aomori Japan

Key words; hatarakigai, yarigai, working motivation, School teachers

Introduction

Japan is actively promoting work style reforms in the face of further declining birthrates and an aging population. This is because the population of Japan, especially the working age population, which is the core of the labor force, continues to decrease, and the labor shortage has become so serious that it is expected to adversely affect the sustainable growth of the Japanese economy¹. The terms “hatarakigai,” “shigoto no yarigai,” and “work motivation” are frequently used as synonyms even in the Ministry of Health, Labour and Welfare’s report of the creation of workplace that is easy to work and rewarding², mass media, and magazines.

Then, we examined whether concepts such as “hatarakigai” and “shigoto no yarigai” contain the meaning similar to the concept of work motivation from preceding research and investigation³. There were following findings: “hatarakigai” is a phrase peculiar to Japan, which shows the state of feeling satisfaction and value by working and performing duties, a generic term of the psychological state that arises in situations relating to working, and an approximate concept of work motivation theory. In other words, “hatarakigai” is considered to be “a positive on-the-spot and on-going psychological phenomenon” regulated by internal and external factors of motivation. Therefore, this research aimed to examine the relationship between psychological and social factors including “hatarakigai” and work motivation among school teachers who tend to give positive values such as “hatarakigai” to their jobs despite high job stress⁴.

Methods

1) Subjects and Methods

I conducted a cross-sectional survey that included closed-ended questions. Subjects were primary, middle, and high school teachers registered of internet research company. The survey period was September to October 2018, and 308 respondents were analyzed.

2) Survey Items

Subjects were asked to answer following 36 items: (1) basic attributes (age, sex, type of school, organization of school, and job title), (2) employment status (job appointment, class homeroom teacher, club activity adviser, management work, overtime work and take-home work hours in the last one month, and (3) multi-aspect work motivation⁵⁾.

This research was conducted with approval from Ethical Review Board of Aomori Chuo Junior College (August 27, 2018).

3) Research Methods

We examined the causal model using structural equation modeling based on my hypotheses in order to verify the relationship between social and psychological factors including “hatarakigai” and work motivation. More specifically, we conducted exploratory factor analysis (maximum-likelihood method with promax rotation) in order to extract latent variables from answers on basic attributes and employment status. Then, we constructed a causal model consisting of “competitive motivation,” “cooperative motivation,” “learning-oriented motivation,” and “achievement-oriented motivation” with “work motivation” as the latent variable. The goodness of fit was verified with a statistical significance level of less than 5%. Bell Curve for Excel 2016 and Excel covariance structure analysis (ver. 2.0) was used for the analysis of data.

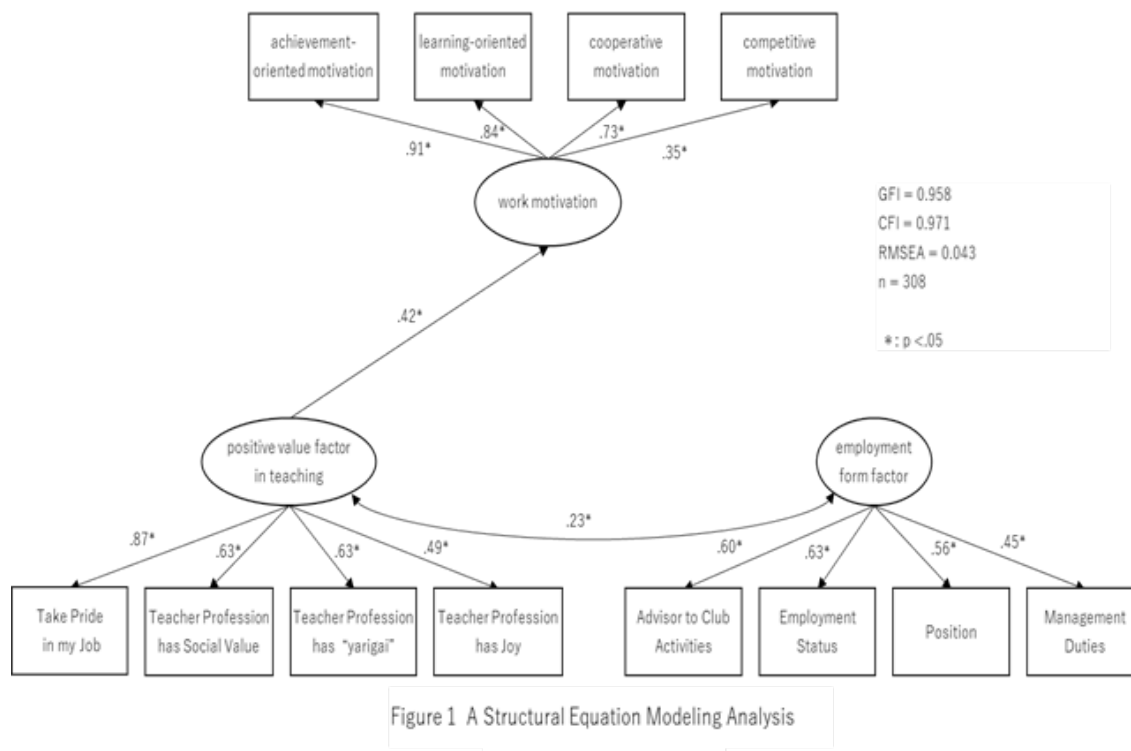
Results

Exploratory factor analysis extracted two factors: “positive value factor in teaching” and “employment form factor” (see Table 1). “Hatarakigai” of school teachers was extracted as a factor influenced by “positive value factor in teaching.”

Table 1 Exploratory factor analysis from answers on basic attributes and employment status (maximum-likelihood method with promax rotation). (N=308)

	Factor 1 positive value factor in teaching	Factor 2 employment form factor	Factor 3 School Type	Factor 4 Age
1.Take Pride in my Job	0.898	0.019	-0.045	0.007
2.Teacher Profession has Social Value	0.628	0.002	0.023	0.034
3.Teacher Profession has "yarigai"	0.603	0.024	-0.038	0.004
4.Teacher Profession has Joy	0.480	-0.081	0.034	-0.049
5.Advisor to Club Activities	-0.003	0.630	-0.289	-0.056
6.Employment Status	0.003	0.615	0.097	-0.029
7.Position	-0.095	0.603	0.145	0.041
8.Management Duties	0.122	0.445	0.142	0.048
9.School Type	-0.043	0.015	-0.984	0.079
10.School Installer	0.015	-0.283	-0.437	0.004
11.Age	-0.033	0.007	0.092	0.740
Eigen value	1.452	2.173	0.989	0.703
Contribution ratio	10.18%	15.53%	8.21%	5.66%

In the verification of the causal relationship model, "positive value factor in teaching," "employment form factor," and "work motivation" were introduced as latent variables on the basis of the hypothesis model³⁾. The path diagram was constructed with reference to the goodness-of-fit index (GFI, CFI, and RMSEA) of the model⁶⁾, factors and paths were added and subtracted based on the adjusted index, and the model was repeatedly corrected. Then, the model with all coefficients significant at the 5% level in the Wald test was adopted as the model with the best fit (see Figure 1). In the path diagram "positive value factor in teaching" had a direct effect (0.42) as a factor affecting "work motivation." "Employment form factor" had correlation with "positive value factor in teaching" (0.23), giving an indirect effect on "work motivation," but no significant coefficient giving a direct effect was obtained.



Discussion

Structural equation modeling is a statistical approach to understand social and natural phenomena by identifying causal relationship between latent and observed variables. In this study, a highly suitable model in which psychological and social factors affect work motivation was constructed after repeated correction based on each correction index.

An overview of previous research on “hatarakigai” reveals that it is understood from the viewpoint of intrinsic and extrinsic factors in motivation theory and job satisfaction³⁾. Motivation is defined as the phenomenon of an act occurring, activated, maintained, and directed, and terminated. It is known that there are psychological factors such as “cognition,” “emotion,” and “desire” within individuals that regulate motivation⁷⁾. This research also suggests that “hatarakigai” is a factor that influences their impression of work. That is to say, “hatarakigai” is not an approximate concept of work motivation, but is a factor of an individual’s impression of work that affects work motivation.

This research is, however, only a cross-sectional internet survey of school teachers, therefore, the result of structural equation modeling that showed the relationship between work motivation and psychological and social factors in this study is not easily generalized to other cases. In future research it is necessary to develop this argument by investigating occupation, basic attributes, employment situations, and ideas for jobs in detail.

References

- 1) Murata Yoshio: Overview of Work Style Reforms and Priorities for Companies. Knowledge creation and integration, 2017; 25(7):4-9.
- 2) Ministry of Health, Labour and Welfare: Survey report on creating a comfortable and rewarding workplace, 2014.
- 3) Mino yosuke: HATARAKIGAI and Work Motivation. The Journal of Aomori Chuo Junior College, 2019 ; 32:213-217.
- 4) Mino Yosuke. Yoshida Hiroko: The Report of High School Teachers Occupational Stress Relating to Their Commitment to Job: From The Analysis of Questioner Survey. Journal of Health Sciences of Mind and Body, 2018 ; 14(1):34-42.
- 5) Ikeda Hiroshi. Morinaga Yuta: Developing a Measure of Multi-faceted Work Motivations in Japanese Organizations. Japanese Association of Industrial / Organizational Psychology Journal, 2017 ; 30(2):171-186.
- 6) Kano Yutaka. Miura Asako: Graphical multivariate analysis. Gendai-Sugakusha Inc, 2007.
- 7) Kage Masaharu. Theory of motivation to learn: Motivational Educational Psychology. Kanekoshobo Inc, 2014.