Factors of Vocational Identity for Social Welfare University Students in Japan

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Abstract—The study aimed to verify a hypothesis that a sense of fulfillment in student life and perceived stress in training in the facilities could affect vocational identity among social welfare university students, in order to acquire implications for enhancing the vocational consciousness. A questionnaire survey was conducted with 388 third- and fourth-year students of training course for certified social workers in three universities in A prefecture in Japan. The questionnaire was returned by 338 students, and 288 responses (85.2%) were valid and used for the analysis. As a SEM   result, the hypothesized model proved to be fit to the data. Path coefficient of sense of fulfillment of student life to vocational identity was statistically positive. Path coefficient of training stress to vocational identity was statistically negative.

Keywords—Training stress, Physical health, Sense of fulfillment of student life, structural equation modeling (SEM)

I. INTRODUCTION

THE previous studies have attempted to measure professional sense and other related constructs such as vocational identity and occupational readiness of university students[1-2]. Of these constructs, vocational identity have been used and examined for students of any grades, because it is applicable to comprehend subjective part of consciousness of students in the growing process[3].

Since 1960s, various kinds of scales for vocational identity have been developed as well as the scale for other identity[4-5] . The effort to develop the scale was provoked by Erikson's identity definition. He defined identity (or better: Ego-identity) as "a feeling based on two observations: the observation of a consistency and continuity of the self, and the observation, that others recognize this continuity and consistency too". Erikson's identity definition also affects the development of a scale for measuring vocational identity among Japanese university students[6]. For example, based on the Erikson's definition, Fujii structurize vocational identity concept of medical university students and developed the vocational identity scale consisting of "consistency", "continuity", "personal side", and "social side"[3].

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Previous studies on vocational identity of medical university students (e.g. nursing students) reported that there were the differences of vocational identity according to grades of students and the   level of most of students were the highest

when they enter, and decreased in the process to advance to the next grade and increased again when they graduated[7-8]. In addition, some studies reported that what students experienced led to the development of vocational identity. The results of these studies shows the support to professional consciousness needs to consider its difference in grades of students.

Although the previous studies clarified the difference due to grade, there are few studies which examine its relations with university life as a background of grade. Iwata[12] and Komatsu[13] examined on-site and clinical training(hereinafter quote it as " "training"). They pointed out that it was an individual's experience of reality called a profession, and it located oneself in the society, and it was a positive factor for vocational identity to form identity in individual students after the process of reciprocal interaction between society and students.

On the other hand, Tashibu[14] and Koyabu[15] made a negative report and pointed out that as students knew the harshness of society through training and they clarified their own tasks one by one with few occasions to feel the sense of achievement, they could not gain the sense of conformity of oneself with the profession, and thereby decreased the vocational identity.

The results of previous studies imply the training executed in medical and social welfare fields has both positive and negative effect on vocational identity. A crucial task in finding the formation of social welfare students' vocational identity is to clarify what function facilities training has on those students. In addition, Mori[16] and Nakano[17] reported that students with the sense of fulfillment of in daily and student life have comparatively higher identity. Therefore, it is needed to develop a study on vocational identity including these studies.

With the above studies as a basis, the study aimed to verify a hypothesis that a sense of fulfillment in student life and stress received in training in facilities could affect vocational identity, in order to acquire implications for enhancing the vocational consciousness of students in social welfare field. Furthermore, this paper uses the Shibata's [18] definition of vocational identity to define the sense of selecting a profession fit for oneself based on social reality and their own ability and aptitude.

II. METHODS

A. Data collection

An anonymous and self-administered questionnaire survey was conducted for one month from February to March in 2010 for third- and fourth-year students of training course for certified social workers in three universities in A prefecture in Japan.

B. Ethical Consideration

This research was approved by "Ethical committee of Okayama Prefectural University" beforehand, and the purpose and outline of the research were informed to respondents. A Filled-out sheet of the questionnaire was strictly stored for the protection of privacy.

C. Study variables

1) Basic Attributes

Sexes, grades, and qualifications to be acquired.

2) Vocational identity

Vocational identity scale, which Fujii (2002) developed, based on phenomenological subjective experiences of consciousness consists of 20 items for students in medical and its related fields. This research used the scale in which part of "subject" was changed into "one" for social welfare field[3]. The scale consists of four factors: selection of the profession and confidence in growth, establishment of view of profession, pride in being needed in workplace, intention of contribution to society. Seven-point Likert scale was used for the answers and scoring to each item: from "1: quite untrue" to "7: true" with a higher scores indicating stronger vocational identity. Content validity of the scale was examined by confirmatory factor analysis (CFA) and reliability was assessed by Cronbach's alpha coefficient.

3) Sense of fulfillment of student life

The sense of fulfillment of student life was measured by the scale developed by Togari in 2008[19]. The six-item scale shows the degree of situations of students who have comparatively plenty of free time and lives a fulfilled life making god use of time. Five-point Likert scale was used for the answers and scoring from "1: not true" to "5: true" with higher scores indicating higher fulfillment.

4) Physical health

The scale developed by Togari in 2008 [19]consists of 7 items : view of total health, sleep, appetite, state condition of digestive organs (diarrhea and constipation), pain, and others. 4-point scale was used for the answers consist of from "1 point: quite untrue" to"4 points: very true" for these several weeks. Lower scores show better conditions.

5) Training stress

Training stress was assessed with the scale developed by Sakano and colleagues in 2008 [20]. The scale consists of 42 items specifically for students in social welfare field, and consists of 5 factors: dissatisfaction of support skills and guidance in training in facilities, lack of knowledge and skills as a trainee, difficulty to ask questions to workers of facility, negative evaluation given by trainers of facility, and difficulty

to care for users. The respondents were asked whether or not they experienced such events and situations during training by 2 -point scale "have" or "have not". The more answers of responding "have" showed they experienced more stress in training. Construct validity of the scale was examined by confirmatory factor analysis and the reliability was examined by Cronbach's alpha.

D. Statistical analysis

A hypothesized model that the sense of fulfillment in student life and training stress would affect vocational identity was tested with structural equation modeling (SEM). The model fitness to the data was assessed with several fit indices. Prior to the analysis, cross validity of the training stress scale was assessed with confirmatory factor analysis (CFA). Construct validity of the vocational identity scale, the sense of fulfillment scale, and the physical health scale were examined by CFA and reliability was examined by Cronbach's alpha. The data of 288 persons with no missing value in items were used out of collected questionnaire of 338 persons. (85.2% valid response rate)

III. RESULTS

A. Distribution of basic attributes of students

In the distribution of attributes of 288 students, the largest number of answers (217students, 75.3%)concerning qualifications students who expected to acquire was "certified social worker only" Twenty-five students (8.7%) answered "social worker and psychiatric social worker". Twenty-one students (7.3%) answered "certified social worker and care worker", and 20(6.9%)" answered "social worker and nursery teacher.

B. Feature of vocational identity scale

1) Distribution of scores and examination of construct validity and reliability

The largest number of responses to answer "'True" for the item of vocational identity scale was "Want to serve users as social worker" (58 persons, 20.1%). The next in order was "Want to respond to user's needs as a social worker" (53, 18.4), and subsequently "Was right to choose a social worker" (49, 17.0).

As a result, CFI was 0.897 and RMSEA was 0.095 which nearly satisfied statistically acceptable level and Cronbach's alpha was sufficient value of 0.957. Concerning scores the average of vocational identity was 81.2 points out of 140. Standard deviation (SD) was 22.1, and Range was 20-140 points.

C. Construct validity of the scale, examination of reliability and score distributions

1) Sense of fulfillment of student life

The largest number of responses to answer "True" for the item concerning sense of fulfillment of student life was "Met with a variety of people" (222 persons, 77.1%), and the next was "Came to know unknown world to me" (163, 56.6%). As a CFA result, after twice modifications to the model, CFI was

0.947 and RMSEA was 0.089, which nearly satisfied statistically acceptable level. Cronbach's alpha was 0.865. Concerning scores the average of sense of fulfillment of student life was 26.6 points out of 30. SD was 2.82 and range was 16-30 points.

2) Physical health

The largest number of responses to answer "Quite untrue" for the item concerning physical health scale was "Cannot enjoy eating food" (177 persons, 61.5%), and next in order was "Cannot sleep well" (116, 40.3%). As a CFA result, after twice modifications to the model, CFI was 0.945 and RMSEA was 0.084 which nearly satisfied statistically acceptable level. Cronbach's alpha was 0.781. Concerning scores the average of physical health scale was 14.3 points out of 28. SD was 3.99 and Range was 7-26 points.

3) Training stress scale

The largest number of responses to answer "had an experience' for the item concerning training stress scale was 'Felt anxiety to go for training" (208 persons, 72.2%), and next in order was "Concerned about evaluation by trainers" (188, 65.3%). The result of training stress scale which was examined by confirmatory factor analysis, CFI was 0.935 and RMSEA was 0.038 which nearly satisfied statistically acceptable level.

D. Relationships between sense of fulfillment of student life, perceived training stress and vocational identity

The SEM result is shown in Fig.1. Goodness of fit of the model to data was 0.960 for CFI and 0.051 for RMSEA which nearly satisfied statistically acceptable level. Path coefficient of sense of fulfillment of student life to vocational identity was significant (0.22), and path coefficient of perceived training stress to vocational identity was significant (-0.13). As for control variable, course had a positive effect and physical health had a negative effect on sense of fulfillment of student life: course and physical health had a positive effect and grades had a negative effect on perceived training stress. Grades had a positive effect and physical health had a negative effect on vocational identity.
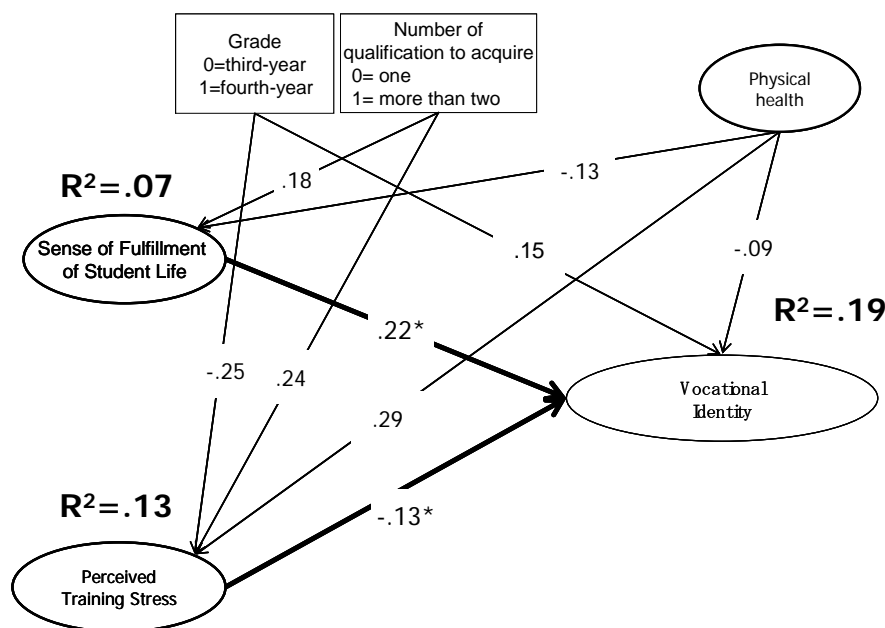

Fig. 1 The SEM result of the hypothesized model
All arrows indicate significant association (p<.05)
First-order factors and indicators of each factor are omitted to avoid complication

IV. DISCUSSION AND CONCLUSION

With the previous analysis as an assumption, feature of vocational identity of students in social welfare field of this research was examined. As a feature of the data obtained in the research, the average was 81.2 points and Standard deviation was 22.1 for score of vocational identity scale.

As the result was similar to the one of studies of Fujii[3] and Ochiai[10] for students in nursery course, it could be estimated that vocational identity was already formed to some degree when they entered a university, because the both educate professionals. Then a hypothesized causal model, which assumed sense of fulfillment of student life and training stress could affect vocational identity was constructed, and the

goodness of fit of the model to data and relationships between variables were examined by SEM. As a result, the model proved to be fit to the data. Path coefficient of sense of fulfillment of student life to vocational identity was statistically positive. Path coefficient of training stress to vocational identity was statistically negative. Goodness of fit of a causal relationship model to data was 0.960 for CFI and 0.051 for RMSEA which nearly satisfied statistically acceptable level. Concerning control variables, sense of fulfillment of student life was higher for students who would obtain two qualifications, and lower for students who were lower in physical health. Training stress was higher for students who would obtain two qualifications and low in physical health, and the higher in grades the lower in training stress. Vocational identity was higher for students in higher grades and lower for students whose physical health was lower. All these results supported previous studies [7, 13, and 22]. Yet it can be considered that students who would obtain more qualifications were high in consciousness of learning, and had a tendency to be higher in sense of fulfillment of student life. On the other hand, it can be considered that as increasing occasions of training would be burdensome and past experience of failure in training might make them unadaptable to training, and the possibility would be higher for them to lose confidence in achieving tasks. The result of the research verified the hypotheses that sense of fulfillment of student life and training stress could affect vocational identity. After all, fulfillment of student life and avoidance of experience of excessive stress in training are significant factors to enhance vocational identity of students. On the other hand, a previous study reported that experience of training could be the occasion to enhance vocational identity[17]. This research suggested that though various experiences and awareness of students could affect vocational identity of students, dissatisfaction towards guidance by trainers in facilities and lack of knowledge and skill as a trainee could be a factor to keep from forming vocational identity. Further studies are required to examine in this regard. Still based on this research, universities would need to have educational approach not to disrupt impede forming of vocational identity of students. They also would be expected to improve training program in cooperation with trainers of facilities and execute guidance to provide give original training tasks and plan before training, and feedback for the tasks clarified in training to students after training.

In the end, an educational program is needed to help students combine experience obtained by training with learning in universities and improve the knowledge and understanding.

As Iwakawa says, it should be considered to make a rule that students who learned basic subjects in social welfare with certainty are allowed to take a guidance course of training[21], Students need to understand their own personality and to obtain minimal communication ability necessary as trainees[24]. They are expected to participate actively an active learning program as a part of volunteer activities and classes besides training.

Concerning student's life the result supported the previous studies of Nakano and others [17] that "Students with higher sense of fulfillment in learning are more encouraged to obtain identity.

" Other previous studies reported "Students who wish to engage in care worker as a professional take many requisite subjects for obtaining qualifications and have high density of time schedule of classes, they have a tendency to report mental and physical problems and have a depressive illness". University education should refrain from excessive attention to task like learning in specialized field, acquisition of qualifications and finding employment in order to train students to have capacity to be aggressive and distinctive personality.

It is required to have a perspective to conduct education to enable students to feel sense of assurance and confidence in fulfillment in student life and in being appreciated, and to give students supports including mental one and to have flexible curriculum to take and liberal arts education.

As above this research examined factors relating to vocational identity of students who learn social welfare in a four-year university. Though the goodness of fit of the hypothesized causal model to data was statistically supported, hereafter it is needed to examine with the use of different samples. It is also needed to clarify what factors relate to vocational identity, and which result would bring significant knowledge to discuss what university education should be.

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