

Chapter 1. Summary

1. Objective of the Research

In the late 1990s, amid the prolonged recession following the collapse of the so-called “bubble economy”, a large number of middle-aged and older white-collar workers, who had formed the core of their companies, were let go by their employers due to bankruptcies and lay-offs. Unemployment in these two groups can cause a wide variety of problems, particularly if the unemployed worker is the head of a family; serious family issues could arise, including difficulties in paying for children’s education. When one is forced out of a job involuntarily, their career is abruptly terminated and losing one’s job due to corporate restructuring can cause feelings of one’s self being denied significance, thus resulting in psychological issues. The unemployed also face the difficult challenges of integrating their past career with one they should establish going forward. The qualities of the middle-aged and senior unemployed who visit “Hello Work”, public job-placement offices, have consequently changed and their issues have become more complex.

In postwar history with the background of recession and institutional changes, such as the extension of the retirement age, the labor administration has sometimes tried to improve and strengthen their re-employment support services for the middle-aged and seniors; however, times are now different. As the “life-long employment system” has collapsed and personnel management has become increasingly performance-based at the company side offering jobs, and as the unemployed, job seekers, face various and more complex career challenges, the labor administration must promote new re-employment support services to accommodate these new difficulties.

The goal of our project is to develop new tools

that will contribute to the improvement and strengthening of re-employment support services of the middle-aged and seniors over the next three and a half years from October 2003 making use of study results accumulated by the study team of this project.

2. How to Advance the Study

It became clear that tools to be developed should have the following characteristics:

- A. Development of tools/systems that contribute to the advancement of fundamental processes of re-employment support services from self-recognition to employment.
- B. Development of new types of tools/systems, instead of mere replacement with existing tools/systems.
- C. Development of tools/systems that can be used in public facilities such as “Hello Work” public job-placement offices.
- D. Development of tools/systems giving due consideration to the time restriction.
- E. Development of tools/systems that utilize JILPT research experience and resources.

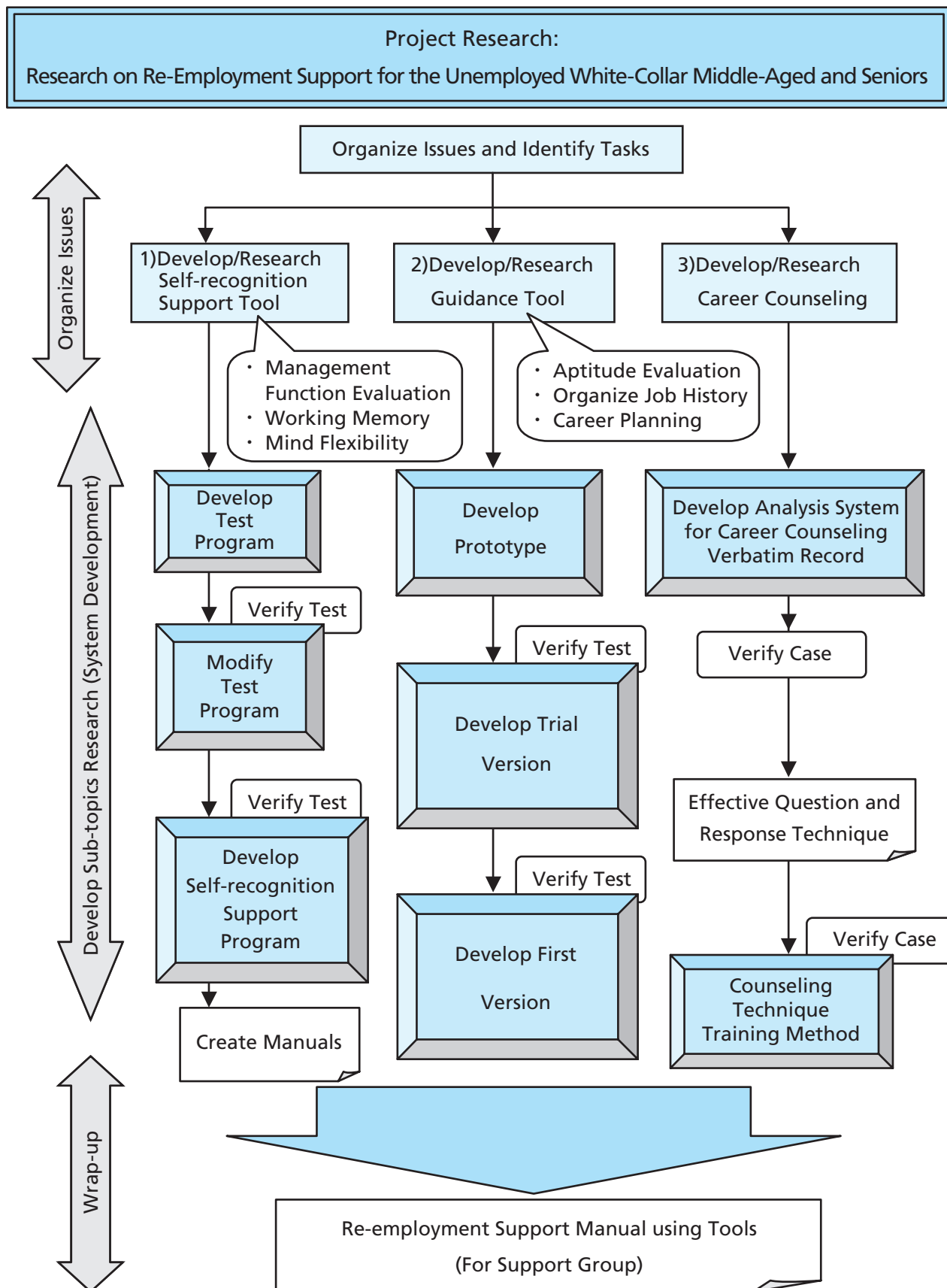
When implementing our research, we identified subjects for specific development and research by reviewing related surveys, hearings, and materials; subsequently, we selected the following three themes:

- i. Development of a new tool to support self-recognition
- ii. Development of a new guidance tool to support career planning
- iii. Development of a technique to provide appropriate career counseling

The following figure shows a conceptualized chart of our research.

The outline and current situation of a new tool and a system developed under each theme is reported from Chapter 2. The situation is as of March 2006.

Figure 8-1 Project Research Flow Chart



Chapter 2: Development of a New Tool to Support Self-recognition

1. Introduction

Under this theme, the following three tools were developed and released as “Self-recognition tools”:

- A. Management function behavior list
- B. Working memory/Short-term memory test
- C. “Mind flexibility” list

Each tool is discussed below:

2. Management function behavior list

A. Objective

Middle-aged and older job seekers generally experienced managerial roles in varying degrees in their careers, and it would be beneficial for both middle-aged and older job seekers and employers to make use of their experiences.

This list shows various situations of issues to be solved and behaviors to solve them, and asks them to answer the certainty of their behaviors. With characteristics of their behavioral patterns obtained from their answers, this list will estimate and show individual potential management function profiles and obtain management function advantages and job information in which such advantages can be used to assist seeking possible careers and career options from the aspect of management function.

B. Methods

i. The list consists of 18 situations of issues to be solved (*example: When you go to a shop to buy a product, there is no such product at the shop and the shop clerk says it takes about three months to get it on backorder. Although there is a different product with similar functions, its design is far worse than you want. What would you do?*) and 3 to 7 behaviors to solve them (*example: a) I would wait for three months to get what I want., b) I would buy the different product with similar functions, etc.*). Respondents are asked to answer the certainty of behaviors to solve issues on a scale of one to five (1: Not to adopt, 2: Unlikely to adopt, 3: No opinion, 4: Likely to adopt, 5: Highly likely to adopt).

ii. On the other hand, a database of “work survey slip”, a work analysis questionnaire developed based

on McCormick’s Position Analysis Questionnaire (PAQ), combined with the list above 1) is prepared for many incumbents.

iii. As for the pattern of answer to the list, an estimate value is calculated by the conversion to 18 management function scales selected from “work survey slip” data based on the database above 2), and the management function scale profile will be made based on it (see Figure 2 for 18 management function scales).

iv. Job seekers will deepen the understanding of his/her best management function utilizing obtained management function profile for his/her reference when seeking and selecting jobs.

3. Working memory/Short-term memory test

A. Objective

Middle-aged and older persons may not be able to perform duties as before due to physical and mental aging. In addition, in consideration of possibilities of inexperienced work, it is necessary to examine if he/she can learn a new job. Therefore, in the process of middle-aged and older persons’ career counseling and guidance, it is necessary to not only clarify job seekers’ experiences but also consider if they can perform such duties. Job seekers should deepen understanding of themselves and more actively consult based on such understanding. This test is for understanding of mental aging which is difficult to realize unlike physical aging and for considering if they can effectively continue to perform such duties. In this test, as data for consideration, working memory and short-term memory which have not been measured before as characteristics of vocational capabilities, necessary information processing capabilities in performing cognitive tasks, are measured and evaluated. This is because duties requiring reasoning, decision-making, planning and information processing are performed by mental information processing in many cases. The performance of such advanced cognitive tasks is supported by complex psychological information processing of stored information.

B. Methods

i. Measurement and rating of working memory:

Figure 8-2 18 Management Function Scales

- I. Mental process (Which level can the person solve an issue which requires mental process such as reasoning, decision-making, planning and information processing at?)
 1. Work arrangement
 2. Information transformation
 3. Numerical information processing
 4. Individual decision-making/determination
 5. Job-related decision-making/determination
 6. Use of instruments/equipment
- II. Human relations (Which level can the person respond to human relations required for executing the work and the associated psychological stress at?)
 7. Oral communication
 8. Written communication
 9. Oversight/Instruction
 10. Teaching
 11. Accommodation/ Adjustment
 12. Advice
 13. Tense human relations
 14. Struggling in human relations
- III. Job requirement (Which level can the person respond to required labor conditions and job characteristics at?)
 15. Morality
 16. Consultation
 17. Adaptability
 18. Inspection

The function of working memory which performs information processing and storage at the same time, called “mental notepad”, is measured to evaluate the attention control capability. Specifically, calculation formulas of addition, subtraction, multiplication and division are expressed and respondents are required to determine if the calculation results of those formulas are correct (verification of formula). At the same time, they are also required to memorize the underlined part of numerical values in the formulas.

After the expression of 2 to 6 calculation formulas, each formula is expressed with the blank where the underlined values should be in. Respondents are asked to fill in the blank. The expression time of the formula is five seconds, the expression interval is one second and trial interval is two seconds. The number of corrected formula is defined as operation span capacity and its capacity is evaluated.

Although this age group of the middle-aged and older persons shows smaller capacity of the working

memory than that of younger persons, their performance is improved when repeating the measurements, so there may be learning effect. The results will be rated on a scale of one to four compared with averaged level of younger persons' operation span capacity: Working memory capacity is: 1. Far lower, 2. Slightly lower, 3. As same as averaged value of younger persons, and 4. Higher than averaged value of younger persons. Comments for understanding themselves corresponding to those ratings will be made.

ii. Measurement and rating of short-time memory: The short-time memory capacity, how many numerical values can be memorized in a very short time, is measured. Specifically, respondents memorize two to six memorizing cards. Then target cards are randomly expressed and they answer if those are memorizing cards. The expression time and expression interval of memorizing cards are one second respectively and the expression time and expression interval of target cards are two seconds respectively.

It has been found that the function of short-time memory does not show major changes up to like the age of 60. The results will be rated on a scale of one to four compared with averaged level of younger persons: Short-time memory function is: 1. Far lower, 2. Slightly lower, 3. As same as averaged value of younger persons, and 4. Higher than averaged value of younger persons. Comments for understanding themselves corresponding to those ratings will be made.

4. "Mind flexibility" survey slip

A. Objective

One of mental factors making middle-aged and older persons' reemployment difficult is to stick to previous experiences and images and decrease options of his/her reemployment. The more the individual experience was successful, the stronger they stick it. Therefore, they may focus attention on one thing and get stuck in it or may not be able to flexibly examine the possibilities. Such small issues in which younger persons can easily overcome would be obstacles for their reemployment. So, we paid attention to "mind flexibility" (rigidity) as one of

factors in which they cannot increase options of their reemployment and have no job images of new options, and developed an inventory to mentally support their reemployment by reminding themselves their "mind flexibility" which narrows their possibilities.

B. Methods

The flexibility used in this system consists of the following five categories, and is rated on a scale of one to five: 1. Not applicable, 2. Less applicable, 3. No opinion, 4. Slightly applicable, 5. Very applicable.

The scale of flexibility used in this system was developed in this study based on the earlier study.

- i. Lack of adaptability (Example: Easily able to adapt to the new environment*)
- ii. Lack of flexibility/applied skills (Example: Quick-thinking person*)
- iii. Rigid insistence (Example: Stuck in his/her way)
- iv. Lack of imagination/creativity (Example: Like to daydream or imagine wasting his/her time*)
- v. Excessively maintaining discipline (Example: Schedule-dependent person)

*Opposite examples

Pointed advice will be provided depending on the "flexibility" as well as profiles for five scales.

Chapter 3. New Guidance System Development to Support Career Planning — Career In-site MC

1. Background of the study

In considering support for reemployment of middle-aged and older persons, it is often pointed out that the importance for career choice is to take advantage of techniques and skills acquired in the past career. However, if they undue focus on the past work and career, they may narrow the range of career choice by themselves. Though it is true that taking advantage of skills acquired in the past career is important, it is sometimes necessary to review the individuality from simple viewpoint: what I can do now and what I like including hobbies and daily life.

Therefore, "Career In-site Mid-Career (MC)" was developed, aiming to give middle-aged and older

persons a chance to review their individuality away from the past work and career for a while and consider the career choice based on current capacity and hobbies. The system which can be used to evaluate aptitudes, seek jobs and check off aptitudes and jobs by computer is called Computer Assisted Careers Guidance System (CACGs). “Career In-site MC” is a CACGs developed for middle-aged and older persons.

2. Structure of system

This system is equipped with the following four functions on the model of typical system in the West: “Aptitude evaluation”, “Integrated evaluation”, “Occupation information service”, and “Career planning support”. Across all age groups, it is important for career choice to understand oneself, and their career, match these, and prepare a career plan (see Figure 8-3).

3. Direction of utilization

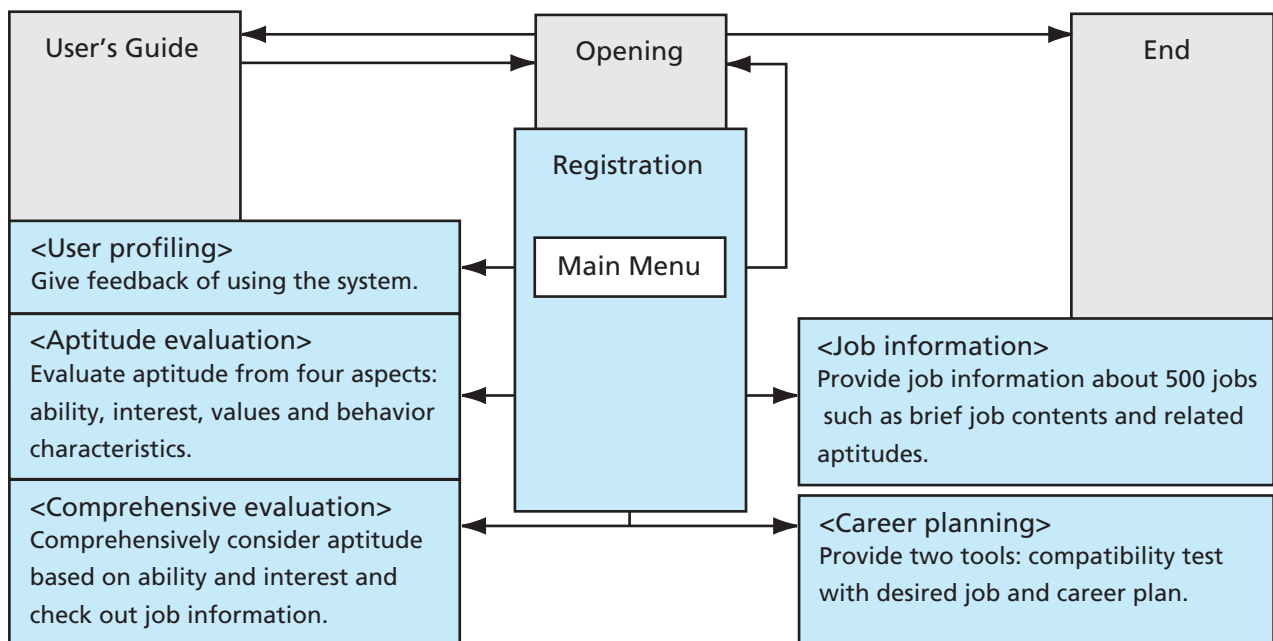
“Career In-site MC” can be used for the following situations as a career guidance system for middle-aged and older persons:

A. As a tool for consultation for persons in charge of

career counseling or for career counselors

According to hearings conducted during the development process, there was a need that middle-aged and older persons would like to consider his/her aptitude when seeking a place of reemployment. On the other hand, when the person decides to seek a particular job similar to former job or seeks a job with conditions other than aptitude such as work location and wage, it is less often to require aptitude evaluation. When the person would like to find a new line of work or review oneself in seeking a place of reemployment, it is often to require aptitude evaluation. Therefore, in order to deepen understanding of oneself and newly discover oneself, it is effective for considering reemployment that persons in charge of career counseling and career counselors incorporate the use of the system into their counseling process, designate inspections to be carried out and consider the results together. Someone reported that especially when job seekers had difficulty in seeking a place of reemployment, it was effective to utilize a such tool for rebooting their mind.

Figure 8-3 Structure of “Career In-site MC”



B. As a tool for middle-aged and older persons to deepen understanding of themselves

Similar to “Career In-site” younger persons’ version, various scales to deepen understanding of oneself are embedded into “Career In-site MC”. Especially there are job interest evaluation and behavior characteristics evaluation which are new scales revised drastically from younger persons’ version. These two evaluations are embedded in consideration of viewpoints required for aptitude evaluation for middle-aged and older persons. The job interest evaluation shapes the direction of middle-aged and older persons to find their interest from their behaviors in daily life regardless of their own job experiences. The behavior characteristics evaluation let them know their basic character/characteristics, thinking characteristics, favorite work environments and good or bad interpersonal skills to find a clue of new job. With these two scales, it is believed that viewpoints to review more aspects of themselves are embedded into “Career In-site MC” than that of younger persons’ version.

Scales of ability and value evaluations which are similar to younger persons’ version have been reviewed based on the standard of middle-aged and older persons. Both are useful tools for understanding themselves. These evaluations are relatively easy ways to review their characteristics from various viewpoints and can be used for understanding of themselves.

C. As a tool of changes in the consciousness of middle-aged and older persons

When a company conducted MC for the aptitude test for persons who wished to take at the joint job interview, 40s and 50s persons looked only to jobs which they experienced before. For instance, if the person’s former job was clerical job, he/she sought clerical job only. However, one person told that he experienced “Career In-site MC” and the result was he is suited to interpersonal job, and he decided to try to seek a job other than clerical job.

There was concerned that this trial at the floor of serious joint job interview might give negative impression to job seekers as an unrealistic “aptitude test by computer”. Surprisingly, however, there were many persons who wanted to use and appreciated it.

It was also valuable experience for developers to directly obtain job seekers’ impressions and evaluations of using the system. It was found through the trial that even middle-aged and older persons with many years of job experience need the aptitude test and may consider it as a material for finding a job.

On the other hand, there may be many persons using the system curiously during the waiting time for their joint job interview. They can obtain knowledge jobs related to their own aptitude by using the system with its results in any way. Since it is easy to use, they may be honest or frankly accept jobs suggested by not people but computer as a reference. If there is a stereotype of career choice at the scene of middle-aged and older persons’ reemployment which tends to be serious, it may be of significance to use this kind of system at ease.

Chapter 4. Effective procedure of career counseling — Career counseling for middle-aged and older job seekers

1. Problems

According to interview survey of persons in charge of career counseling (hereinafter referred as “staff”) in public institutions which conduct career counseling, the problems of career counseling for middle-aged and older job seekers are as follows:

- A. There are not many job openings.
- B. Vocational capability should be reconfirmed.
- C. There is a perception gap of pay standard.

Staff call on middle-aged and older job seekers to understand the difficulty of labor market, reconfirm their own ability and re-realize realistic pay standard.

However, these are problem-solving methods from staff’s perspective. Job seekers’ perspective is different; they emphasize attitude and behavior toward jobs. This is the nature of problems of career counseling for middle-aged and older job seekers. Thus, this is a gap what is considered as “real”. Since employment practice and system have drastically changed, works and jobs have drastically renewed and job seekers’ values, working styles and lifestyles have diversified, the way of career counseling which gives priority to “realistic” determination based on

staff's knowledge and experience has reached a limit.

In this study, we will redefine the career counseling as “a process that job seekers and staff confirm real images each other, think each other and remake mutually acceptable real images” and develop a tool which can be used by staff to promote effective career counseling taking a cue from social constructionism.

In the career counseling process, a communication tool between job seekers and staff is words. We exchange information about “real images” and remake “real images” by words. (We do not remake “reality” itself but remade “real images” will provide a new framework of jobseekers’ behaviors.)

Then, at the career counseling of “Hello Work”, which words do job seekers and staff use? How do they affirm respective “real images”? How do they think together? How do they remake acceptable “real images”? In this study, we developed “career counseling/employment placement verbatim record production/analysis system (hereinafter referred as “system”)” which analyzes characteristics and process of the career counseling from the viewpoint of “expression technique” in languages based on the career counseling verbatim records between job seekers and staff aimed at more effective and efficient career counseling.

2. Framework of the study

The framework of the study to analyze the process of Hello Work’s career counseling is described as follows:

A. Topics of career counseling

Topics are real images shared between job seekers and staff in languages. There are five topics of career counseling (see Figure 8-4): job seekers’ “past experience”, “current situation” and “future activity”, “interpretation” such as understanding and feeling of those events and “society” as social systems such as employment system and labor market behind the events.

These topics will give meaning to relations between events such as “past experience”, “current situation” and “future activity” through “interpretation” based on “society”, and will be

adjusted to the structure of story.

B. Structure of story

The structure of story is that job seekers and staff cooperatively adjust relations and order between topics from the viewpoint of “plot”, “version” and “script” (see Figure 8-5).

- i. Plot: Subject and theme of the story are expressed.
- ii. Script: Events are expressed in chronologic order (past, present and future).
- iii. Version: Viewpoint of told story is expressed.
 - i. and ii. are generally considered as components

Figure 8-4 Construction of Story and Topics

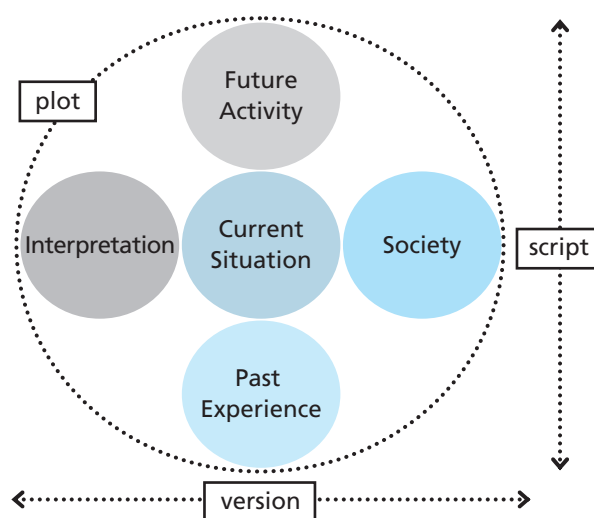
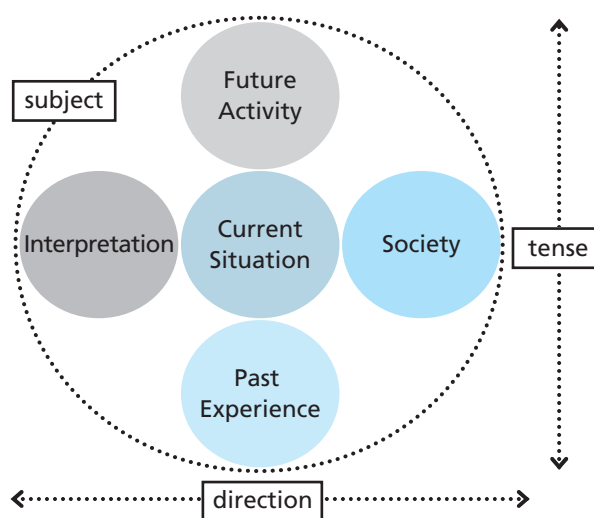


Figure 8-5 Expressional Technique and Topics



of the story in narrative studies of psychological therapy and counseling or studies which consider a career in occupational psychology and career counseling as a story.

In the case of career counseling, when constructing a story, since individual interpretation and social system and mechanism as well as events have a significant impact, it was considered that viewpoints of career should be multifaceted so iii. was added.

C. Expression technique

An expression technique in languages is necessary to adjust relations and order of topics. We named this technique as “expression technique” and defined as “a technique consisting of processes of career counseling or expressions in plural languages to express career in which job seekers and staff can select and conduct appropriate expressions with depending on counseling situation and flow”.

There are four expression techniques: “progress”, “subject”, “direction” and “tense” (see Figure 8-5). As described later, there is “measures” as a sub-technique of “progress”. These are divided roughly into “process expression” to proceed the process of career counseling and “career expression” to adjust topics to the structure of story.

The techniques of the career expression are closely related to the structure of story. “Subject” corresponds to “structure”, “direction” corresponds to “version” and “tense” corresponds to “script” respectively (see Figure 8-4 and 8-5).

3. Development of career counseling/employment placement verbatim record production/analysis system

Based on above framework of the study, we developed software, “career counseling/employment placement verbatim record production/analysis system (hereinafter referred as “system”)” prototype version (Ver. 1.51.) which analyzes characteristics and process of the career counseling utilizing verbatim records.

There are following four purposes of the system development:

A. Verbatim records of career counseling/

employment placement can be efficiently produced by determining a certain format.

B. Produced verbatim records can be efficiently coded in accordance with predetermined classification standard.

C. With given codes, verbatim records can be quantified according to a certain standard. Those values can also be properly displayed.

D. The following activities can be helped through above processes 1) to 3):

- Externalize experiences on career counseling/employment placement.
- Conduct case studies on career counseling/employment placement.
- Consider models on career counseling/employment placement.

4. Use of tools

As an analysis result of true career counseling cases by the system, Hello Work’s typical career counseling behaviors and problems of career counseling for middle-aged and older job seekers were emerged. A few examples are given below:

In the career counseling of Hello Work, staff controls job seekers’ remarks and actively proceed the counseling, thus they tend to lead the counseling. Through time, however, as the counseling progresses, the percentage of staff’s “questions” and the percentage of job seekers’ “answers” become lower on average. That is, staff are more likely to control and lead job seekers’ remarks in the first half of the counseling but less likely to do in the second half of it.

In the case of counseling for younger job seekers, as the counseling progresses, they are actively involved in the counseling and staff may be less likely to actively participate in it. On the other hand, in the case of counseling for middle-aged and older job seekers, both they and staff are less likely to show any time series variation.

As the counseling progresses, both younger job seekers and staff are more likely to tell own thought, idea and feelings. This trend is toward interaction. On the other hand, in the case of counseling for middle-aged and older job seekers, they are more likely to tell their own thought, idea and feelings in the second

half of the counseling without going along with staff.

In the case of counseling for younger job seekers, as the counseling progresses and staff are less likely to tell the past, they are also less likely to tell their past. On the other hand, in the case of counseling for middle-aged and older job seekers, they are more likely to tell their past in the second half of the counseling without going along with staff.

Younger job seekers are more likely to open themselves to staff. On the other hand, middle-aged and older job seekers are more likely to open themselves in the second half of the counseling without going along with staff.

As the counseling progresses, younger job seekers are less likely to tell their past as same as staff. On the other hand, middle-aged and older job seekers are more likely to tell their past in the second half of the

counseling without going along with staff. Therefore, as same as self-disclosure, it is considered important for staff to wait until middle-aged and older job seekers tell their own past.

A workshop program adopting these knowledge and techniques is planned to improve staff's expertise of counseling.

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