Tool Development Supporting Re-Employment of the Middle-Aged and Older Persons

Project Research:
Research on Re-Employment Support for the Unemployed White-Collar Middle-Aged and Older Persons
Interim Report
Summary

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Research Period
September 2004 to March 2007 (Project Research Period)

Objective of the Research
Amid the prolonged recession following the collapse of the 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 due to loss of income.

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 job-placement offices have consequently changed and their issues have become more complex.

With the background of recession and institutional changes, such as the extension of the retirement age, the labor administration has often 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.

When investigating just what these new tools should look like, it became clear that they should have the following characteristics:

1) Development of tools/systems that contribute to the advancement of fundamental processes of re-employment support services from self-recognition to employment.
2) Development of new types of tools/systems, instead of mere replacement with existing tools/systems.
3) Development of tools/systems that can be used in public facilities such as “Hello Work” public job-placement offices from which many middle-aged and seniors expect to receive services.
4) Development of tools/systems for which the time frame for release of commercial versions during the mid-term planning period has been considered.
5) 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:

1. Development of a new tool to support self-recognition
2. Development of a new guidance tool to support career planning
3. Development of a technique to provide appropriate career counseling

The figure in the next page shows a conceptualized chart of our research.

Developing tools takes time since we must follow certain procedures. We have
completed a prototype version and have run several trial tests on a small scale at some associate facilities. We will modify our tool as needed based on the results of these trial tests, and tune it further by repeating the tests on a larger scale; we will release the final version during the mid-term planning period.
Figure: Project Research Flow Chart

Project Research:
Research on Re-Employment Support for the Unemployed White-Collar Middle-Aged and Seniors

Organize Issues and Identify Tasks

1) Develop/Research Self-recognition Support Tool
   - Management Function Evaluation
   - Working Memory
   - Mind Flexibility

2) Develop/Research Guidance Tool
   - Aptitude Evaluation
   - Organize Job History
   - Career Planning

3) Develop/Research Career Counseling

Organize Issues

Develop Sub-topics Research (System Development)

Develop Test Program
   - Verify Test

Modify Test Program
   - Verify Test

Develop Self-recognition Support Program
   - Verify Test

Develop First Version
   - Verify Test

Develop Analysis System for Career Counseling Verbatim Record
   - Verify Case

Effective Question and Response Technique
   - Verify Case

Counseling Technique Training Method

Re-employment Support Manual using Tools (For Support Group)

Wrap-up
Outline of the Report

(1) Part 1: Setting Research Objectives

Based on the premise that this project is a development research, here we report the process how we set the concrete goal of our research. Section 1: Background discusses the background of this project topic as being chosen for the mid-term planning period, and the procedure of examining more specific development goals. Section 2: Setting Research Goals reviews current re-employment support services and the results of the Re-employment Support Survey that was conducted to learn the thoughts of middle-aged and senior age groups on re-employment, and explores types of tools to be developed. Section 3: Development Research Goals and Three Development Themes, examines the characteristics needed for the tool and discusses the process of setting the following three development themes and specific development goals:

1. Development of a new tool to support self-recognition
2. Development of a new guidance tool to support career planning
3. Development of a technique to provide appropriate career counseling

(2) Part 2: Development of a New Tool to Support Self-recognition

We present the process of development research for a new tool supporting self-recognition. Self-recognition is the starting point of re-employment support services and affects the direction of the overall service. We assume this tool will be provided in re-employment support service opportunities, such as orientations, seminars, and workshops.

Chapter 1 discusses the process of development research of a “management function behavior list.” First, we retabulated data from related past studies that used questionnaire for job description analysis and selected the types of work tasks that were evaluated as important or very important in the white-collar group. We classified the tasks into task groups, such as information processing, decision making/problem solving, and interpersonal management. We then created a management function behavior list consisting of 18 items to evaluate behavior characteristics that correspond to the task groups. The list is a survey sheet in which respondents choose an option of behavior from multiple choices in a problem-solving situation. Next, we conducted a questionnaire survey of 708 employed persons (aged 40-60) asking them to respond to the management function behavior list and modified survey sheet for job description analysis. We analyzed the data and the relation between the selected options and work task standards. The results showed that there is clearly a relation between the response in management function behavior list and 18 work tasks such as setup,
supervision, and inspection. Since we discovered that the relation of predicted value and actual value is not sufficient to predict detailed work task levels, we investigated how improvement could be made in the prediction by organizing the predicted work task standards.

Chapter 2 includes the development process of an evaluation tool for measuring working memory and short-term memory. High cognitive tasks observed in white-collar jobs are supported by complicated psychological information processing using short-term memory, long-term memory, and working memory (memory that has both storage and processing functions); we present the process of developing a program to measure volume and function of working memory. Since working memory and short-term memory have different functions, we developed a new measurement method of short-term memory capacity and working memory capacity using an operation span test. We conducted tests using the measurement program installed on a PC to identify how functions of short-term and working memory are different according to one's age. Based on these test results, we learned that some remaining challenges are to develop a program that enables target groups to proceed at their own pace and to allow middle-aged and seniors to try the program voluntarily in many occasions such as career consulting or guidance.

Chapter 3 describes the process of developing a scale for “mind flexibility.” First, we present how the topic of mind flexibility has been studied, and based on those findings, we created a survey sheet including six mind flexibility measurement scales, such as “lack of adaptability” and “lack of application skill.” We conducted a survey of 187 college students using the survey sheet as a preliminary study. We then conducted factor analysis based on the relations of the questions in the survey and modified the scale. Based on the results, we created a survey sheet for the middle-aged and senior groups, and collected data. We also examine the use of the scale for guidance and other support opportunities.

(3) Part 3: Development of a New Guidance Tool to Support Career Planning

We report on the development of a Computer-assisted Career Guidance System (CACGS) as a tool for the middle-aged and senior groups to evaluate their aptitude and how it relates to their own career and career planning. Re-employment is a complicated process, and thus we hope a CACGS can provide a new type of service in re-employment support since the user can use it at their own pace, regardless of time and location.

We reviewed *Career In Site*, which is a CACGS developed by the JILPT for younger
groups as a model for our development. After examining specifications such as design, operability, and function, and conducting hearings with job counseling groups, we determined the development goal, system configuration, development schedule, and created specifications for a prototype version. We also implemented a survey to have a rating standard for each scale. We conducted trial tests using the completed prototype version, and now we are reviewing modifications based on test results.

(4) Part 4: Development of Techniques for Appropriate Career Counseling

The unemployed visiting re-employment service facilities have complex problems, which often need mental support, and getting a job can be a solution to one of their problems. Therefore, efficient and effective counseling support is needed. The developed technique for providing such support is expected to be used in individual career counseling.

Our analysis of the basic processes in career counseling shows that "utterances" form the counseling process. Based on career counseling techniques, we classified these utterances into four types and identified the structure of each: utterance progress, utterance theme, utterance direction, and utterance tense. We examined the idea of using software to create and analyze the verbatim record of a career counseling session and then developed a prototype version. Using this system, we discuss the objective method to understand the characteristics of career counseling for the middle and senior job seekers.
Composition of the Report

Summary

Part 1. Setting Research Objectives
   1. Background
   2. Setting Research Goals
   3. Development Research Goals and Three Developmental Themes

Chapter 1. Development of Management Function Behavior List
   1. Career Aptitude Evaluation for the Middle-aged and Seniors
   2. Characteristics of a Management Function Behavior List
   3. Development of a Management Function Behavior List
   4. Relationship between Management Function Behavior List and Work Task Implementation Standards
   5. Scaling the Management Function Behavior List
   6. Prediction Validity of the Management Function Behavior List
   7. Discussion

Chapter 2. Measurement and Evaluation of Working Memory and Short-term Memory
   1. Objective
   2. Function of Memory
   3. Development of Self-recognition Tool

Chapter 3. Measurement and Evaluation of Mind Flexibility
   1. Introduction
   2. Mind Flexibility
   3. Mind Flexibility and Approach to Career
   4. Preliminary Study
   5. Conclusion

Appendix

   1. Background
   2. Outline of Preliminary Study
3. Development of System
4. Challenges in the Future

Part 4. Development of Techniques for Appropriate Career Counseling
1. Process of Career Counseling
2. Concept of Utterance Classification
3. Process of System Development
4. Future Plan