

# A Study on the Development of the Vocational Rehabilitation Method for Persons with Disabilities who need special care during their Transition period from Training Institutions to the Workplace (Vol.2 (Support for Returning and Adapting to Work))

[Research Reports No.93 (Vol.2)] Summary

# [Keywords]

Total-Package, Return-to-work support

# **[**Points for using the findings**]**

The purpose of this study is to develop a more effective return-to-work method for those on sick leave, mainly from depression. "Total-Package", a supporting tool of vocational rehabilitation was applied on a trial basis to processes of return-to-work support by corporations and medical institutions to examine its effectiveness. Although the applications varied depending on the client's needs and conditions, we have verified that the package is effective for improving both self-understanding and self-management.

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# 2. Period

Fiscal 2007 to 2009

#### 3. Composition of the research report

Overview: The objectives of Special Research 11: "A Study on the Development of the Vocational Rehabilitation Method for Persons with Disabilities who need special care during their Transition period from Training Institutions to the Workplace," and the significance of this report

Introductory Chapter: Framework of research on support for returning and adapting to work

Chapter 1: Issues and needs of "return-to-work support"

Chapter 2: Efforts towards "return-to-work support" by business establishments

Chapter 3: Efforts towards "return-to-work support" by psychiatric medical facilities

Chapter 4: Efforts towards the utilization of the Total Package (TP) in vocational rehabilitation institutions

Final Chapter: The latest knowledge of research on support for returning and adapting to work

References

### 4. Background and Purpose

In order to effectively support persons with disabilities who need special care, e.g. those with mental or developmental disabilities or higher brain dysfunction, in their process of vocational rehabilitation (returning to work and workplace adjustment), it is essential for all the parties concerned, namely, vocational rehabilitation institutions, as well as educational, welfare and medical institutions, to establish supporting methodologies depending on the actual conditions and needs of the respective institutions and the characteristics of disabilities of the persons who need support. In addition, it is also an important approach for these institutions to collaborate with one another in building a regional support network to facilitate smooth returning and adapting to work.

The National Institute of Vocational Rehabilitation (NIVR) has developed integrated supporting tools for

vocational rehabilitation named *Total Package* (hereinafter referred to as the "TP").<sup>1</sup> In this study, by applying the TP systematically, the researchers aimed at inquiring into specific support methods that are suitable to be applied by the respective institutions concerned, thereby contributing to the establishment for a platform for providing work support for persons with disabilities who need special care.

The research on support for returning and adapting to work focuses on the following three targets:

(i) consider the position of the vocational rehabilitation tools developed by the NIVR in the work support programs that are currently in operation at the related institutions and business establishments; identify the needs of the respective institutions and business establishments and sort out problems in developing an environment for supporting their systematic use of the TP, while providing training programs and assistance for human resources development;

(ii) ascertain the status of use of the TP in the process of providing support for returning and adapting to work at each institution and business establishment, so as to find out a method for providing more effective support; and

(iii) consider frameworks whereby the rehabilitation and other institutions and business establishments concerned can collaborate with one another in providing support for returning and adapting to work through the use of the TP, and collect examples of systematic support programs implemented on a regional basis.

Mental health problems in the workplace, consequent sick leave, and then returning to work have been increasing and are of immediate concern today. Therefore, those workers on sick leave mainly due to depression are the main subject of this research.

#### 5. Method

#### (1) Literature survey and implementation of questionnaire-based survey of companies

In order to fully understand the issues and needs relating to support for returning to work, the authors carried out a literature survey into trends in countermeasures taken by companies in regard to mental health issues. The authors also implemented a questionnaire-based survey of 4,500 companies in regard to workers on sick leave for reasons relating to mental health issues (to which 886 responses were received). The results of the literature survey are compiled in Resources Series No. 53, "The current status and issues on "return-to-work support" for workers on sick leave, mainly due to depression (through Literature Reviews)," and it is hoped that interested persons will refer to this. Furthermore, while analyzing and paying attention to the differences between companies with and without return-to-work support programs, trial work systems and workers on sick leave, the survey of companies clarified that there is a need for (1) "a package of work training (OA, administration, etc.) to enable trial work periods and the smooth execution of tasks after returning to work" in companies that have workers on sick leave, and where there are already support programs for returning to work and trial attendance systems, and (2) "a format for sharing information between the company, industrial

<sup>&</sup>lt;sup>1</sup> The *Total Package*, which has been under development since FY1999, consists of tools such as Makuhari Work Sample (MWS), Makuhari Memory Note (M-MN), Makuhari Stress and Fatigue Assessment Sheet (MSFAS), and Wisconsin Card Sorting Test (WCST).

healthcare professionals and the attending physician," and "reading materials that help the person who has taken time off work to understand the attributes of their illness and to promote self-management." Based on these results, the TP developed by NIVR was supposed to be a helpful tool in supporting workers returning to work, and the authors carried out trials.

# (2) Efforts by business establishments towards "return-to-work support"

Diagram 1 shows proposals for the systematic utilization of TP by business establishments, and the status of trial examples of this. In total, nine trial projects were implemented in five cooperating business establishments. Each example refers to the MWS (a component of TP) manual, which enables users to study alone either within the workplace or at home.

The results are compiled as below.

- a. Issues to bear in mind when utilizing TP
- This is not merely a learning material, but must be thought of as a "tool to facilitate self-understanding," and is to be shared between the user and the person monitoring their return at the business establishment (hereinafter referred to as the "monitoring person")
- 2) When adopting the TP, the monitoring person must explain to the user the purpose of it, including 1) above, in order that the person supported does not become concerned that the TP is being used to judge their fitness or otherwise to return to work.
- 3) Consideration must be given to the appropriate timing to start, in order for the MWS to not be a burden to any subject whose symptoms and/or lifestyle rhythms are insufficiently recovered.
- 4) Since repeated, long-term utilization of MWS can cause loss of interest, MWS must be combined with other training related to work issues.

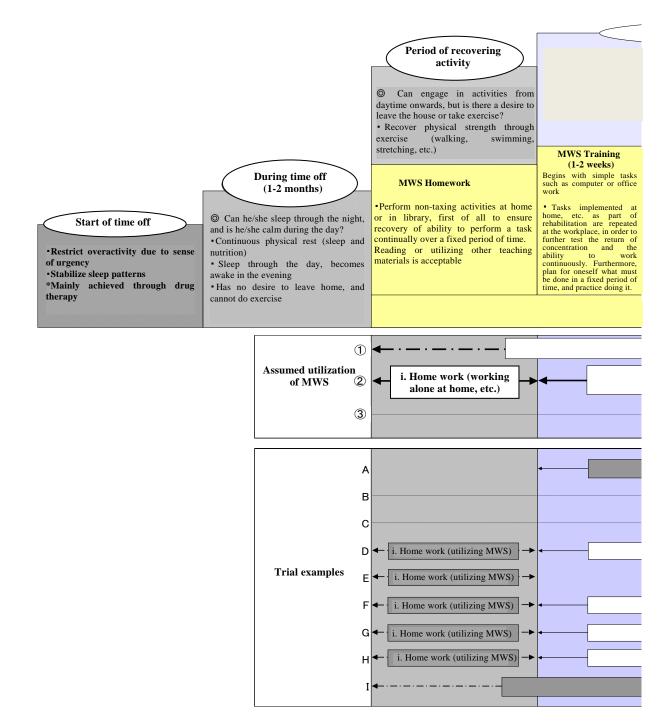
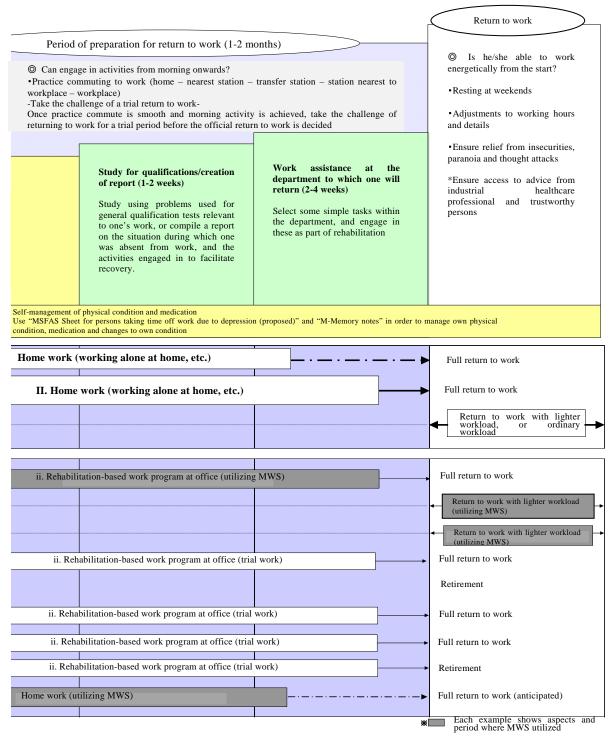


Diagram 1: Basic framework for the utilization of TP in "return-to-work support" by a worker

- b. TP's potential contribution to "return-to-work support"
- 1) Utilizing TP makes consultations more specific, and facilitates the sharing of progress between the subject and the monitoring person.
- 2) Since MWS is not directly connected to the actual work tasks, it results in low psychological resistance, and is therefore easy to introduce as part of preparations for return to work.
- 3) It promotes understanding of progress made in recovery through activity, and of behavioral attributes, and is



who is on sick leave due to mental health issues, and trial examples

therefore effective in assisting the user to understand himself or herself.

c. Issues relating to the systematic utilization of TP

In order to ensure that the self-understanding achieved through the utilization of TP is combined with aspects of the actual workplace, and prevents reoccurrence of the illness in the subject once they have returned to work, it is necessary to establish a system that allows for periodic consultations (including confirmation of progress made, confirmation regarding stress or fatigue suffered by the user during the work, and methods to relieve this, and confirmation of implementation results).

# (3) Efforts by psychiatric medical facilities in relation to providing support for return to the work

Six examples have been trialed in three psychiatric medical institutions and psychiatric health and welfare institutions. In addition, the report shows the details of trials at EAP institutions and training given to industrial health professional staff in industrial health promotion centers, and the state of utilization of TP at the NIVR.

Institution name	Needs	Tools utilized	Results of utilization of tools, etc.
Hospital A	At the start of the return-to-work support program, operational issues were sought that would allow objective evaluation, and sharing between users, staff and companies	MWS simplified version MWS training version M-Memory notes MSFAS	<ul> <li>Appropriate for concentrated implementation</li> <li>Gives users a chance to objectively review their lifestyles</li> <li>Allows efficient collection of information by support staff that could not be gained through interviews alone</li> </ul>
Clinic B	Looking for a tool that would allow the objective evaluation of users' abilities to work	MWS simplified version MWS training version M-Memory notes	<ul> <li>Allows objective evaluation of users' abilities to work</li> <li>Allows understanding of trends in mistakes, effective in introducing and establishing additional methods</li> </ul>
Center D	Identified a need to facilitate recovery of concentration etc., in an environment as near as possible to that of the actual workplace, before returning to work	MWS simplified version MWS training version M-Memory notes MSFAS	<ul> <li>Allows understanding of users' abilities</li> <li>Allows understanding of issues among users</li> <li>Allows revision of advice</li> <li>Allows understanding of basic information</li> </ul>
Institution E	Utilized on a trial basis when aiming to compile users' interests, hobbies, strengths and values, etc.	MWS training version	<ul> <li>Allows confirmation of level of recovery in ability to work and process</li> <li>Allows consideration of achievable activities policies, with aim of returning to work</li> </ul>

Chart 1: State of utilization in various psychiatric medical institutions

The results of trials in psychiatric medical institutions were as follows.

a. Possible contributions of TP to psychiatric medical institutions

- (1) MSFAS allows the efficient collection of information necessary for users.
- (2) MWS simplified version can be used as an assessment tool, given that it can be implemented in a short space of time and allows results to be calculated in percentile order.
- (3) MWS training version not only allows confirmation of the level of recovery of work and processing abilities by the user, it also allows consideration of achievable activities policies with the aim of returning to work based on these results
- b. Issues relating to the systematic use of TP
- (1) A method that will enable efficient improvements to be made to their support skills utilizing TP is demanded, for persons engaged in a variety of different tasks.
- (2) Since TP is a tool for "deepening self-understanding," there is a need for the user and the monitoring person to maintain communication.

In addition, the following information relates to partnerships with research and cooperating institutions where TP has been introduced.

a. Cooperation between Regional Vocational centers for Persons with Disabilities and Training Institutions in supporting the return to work

Research was carried out into the utilization of TP by regional training centers, for use in the support for return to work of persons who find it difficult to commute to a regional vocational center. As a result of this trial utilization, the various institutions have begun to utilize it as a shared tool.

b. Partnerships relating to the startup of return-to-work support programs in related institutions

Regional Vocational Centers for Persons with Disabilities have worked with the authors in holding a TP workshop, for psychiatric medical institutions that have set up their own new return-to-work support programs. Related organizations nearby have begun using TP, allowing for an exchange of information between institutions, and the startup of regional partnerships based on TP.

### 6. Summarized Results of the Study

(1) Methods of implementation of MWS in supporting return to work

Within TP, MWS is usually utilized in training to which the ABA method<sup>\*2</sup> (one of the single case research methods<sup>\*3</sup>) is applied, and attention is paid to changes within the individual, as seen in results attained through implementation (percentage of correct answers, operational time, concentration during activity, ability to continue, changes in level of tiredness, and the process of the individual's self awareness.) MWS is already being widely used at NIVR and welfare institutions, etc., but there was no related reference material for staff who are providing "return-to-work" support at business establishments and psychiatric medical institutions.

The results of this research categorized implementation patterns into those shown in Chart 2, in terms of MWS utilization method in support for returning to work. The issues and characteristics of each pattern are as follows.

#### a. Pattern 1

Based on standard ABA method procedures, consider the introduction of compensatory strategies for enhancing work as required. In order to do this, the monitoring person will be required to undertake detailed training, and during the implementation period, will be required to autonomously promote support through preparing tasks (selecting levels and blocks) and issuing activities instructions, consider and propose the introduction of additional measures, and confirm the adoption of these additional measures. For this reason, in order to ensure the monitoring person has the correct skills, there is a cost involved in time and psychological training, as well as systematic organization.

At the same time, this method allows a comparison of average values of levels and results (proportion of correct answers and work time), and the calculation of these as percentiles in order to confirm trends. Based on these results, the introduction of additional measures and confirmation of their effectiveness allows testing of

X2 A method to investigate the cause and effect relationship of intervention and its effects

<sup>3</sup> A method that focuses on each individual person, and measures the effect of intervention. It also measures the changes in behavior during the period when the person does not accept intervention and the period when the person does, and compares the two periods numerically.

the generalization of additional measures in other operations. Furthermore, the subject makes fewer mistakes as a result of establishing additional measures, which raises their motivation for the tasks and gives them a sense of achievement, leading to a recovery of confidence.

#### b. Pattern 2

Two blocks are implemented at each level as a baseline. Subsequently, regardless of errors, the user implements a repeat of one block in each level per day. Since no attention is paid to the introduction of new measures, this mainly involves practical training of the subject, and promotes self-learning and self-study based on the manual of MWS.

During implementation, the monitoring person is required to do the following: (1) refrain from issuing operating instructions, (2) receive the presentation of results achieved by the subject based on their own implementation plans, (3) implement periodic consultations, during which concentration, the ability to continue at a task, changes in the level of tiredness and changes that the subject recognizes within him/herself are monitored, (4) consider methods to prevent the reoccurrence of symptoms after the subject has returned to work, in cooperation with the subject him/herself. In comparison with pattern 1, the monitoring person has less of a demanding role, but since their level of contribution is also lower, it is thought that it can lead to periods between consultations becoming longer.

# c. Pattern 3

Implemented on the basis of the simple rule that the subject moves up one level per day. Initially, the monitoring person will issue simple instructions (such as "implement all the tasks shown on one page of the clear file," etc.) and communicate rules, and the subject is able to simply select the task.

With this pattern, however, since the same tasks are repeated many times during a period of support, it is easy for the subject to lose interest in the work. Additionally, since it can be implemented by people who have no real interest in the structure and idea of MWS, it is easy to mistake the purpose of the process as merely being able to do the tasks. Furthermore, a disparity can occur between the level of psychological and cognitive burden felt on days when the tasks set are extremely simple, and that felt on days when the tasks are difficult, meaning that it is difficult to equalize the implementation conditions, and making it difficult to interpret the process of changes seen over time in the proportion of correct answers, and the time spent on work.

d. Selecting an appropriate implementation method

In order to create guidelines for selecting a pattern from those mentioned above, it is desirable to implement an integrated assessment based on the MWS simplified version, other operating tests, psychological tests and observations of behavior.

At present, it is considered that pattern 1 is appropriate for subjects with "significant problems with accuracy, which are not improved merely by verbal cautions," while pattern 2 should be used for subjects who "can be expected to learn alone," and pattern 3 for subjects who "can be expected to learn alone and for whom it is thought that understanding the terminology and methods of MWS would be burdensome."

	Chart 2: Attributes of implementation patterns for MWS training version								
	Implementation details	Type of subject to which applicable	Person implementing	Understanding of MWS terminology *1	Implementation conditions	Scope of implementation results			
Pattern 1	Implement baseline period, training period and probe period, consider additional measures, then introduce	Significant problems with accuracy, which are not improved merely by verbal cautions	Person in charge of support for return to work	Required *Level of burden Person in charge of support for return to work > person absent from work	Changes dependent on state of person absent from work. *If no mistakes are made, completes with baseline period. If mistakes are made, training period and probe period must be implemented	By age By level Percentile order			
Pattern 2	After implementation of each level 2 block, implement 1 block of each level per day, regardless of mistakes	Subjects who can be expected to implement independent operation and behavior	Person absent from work	Required *Level of burden Person in charge of support for return to work < person absent from work	Constant	By age By level Percentile order			
Pattern 3	Implement 1 level per day	In addition to pattern 2, subjects for whom it is thought that understanding the terminology and implementation methods of MWS would be burdensome	Person absent from work	Can be implemented without any knowledge	Constant * Difference in level of burden between day when level 1 is implemented and day when level 5 is implemented	By age By level *Percentile order applied to first results only			
	Implementation details	Type of subject to which applicable	Preparation of tasks (what level, selection of block?)	Cost involved in implementation	Advantages	Disadvantages			
Pattern 1	Implement baseline period, training period and probe period, consider additional measures, then introduce	Significant problems with accuracy, which are not improved merely by verbal cautiolns	Even if they understand the terminology, the person supporting the return to work may feel it burdensome until they become used to it.	<ul> <li>Person supporting return to work must be able to issue clear instructions</li> <li>Person supporting return to work and subject must consider need for additional measures</li> <li>Requires significant practical training in understanding terminology and implementing procedures</li> </ul>	- If mistakes are made regularly, the trend can be analyzed and additional measures introduced - Since additional measures ensure that the number of mistakes is reduced, subject is motivated in regard to work and has a sense of achievement	<ul> <li>Person supporting return to work must understand requisite paperwork</li> <li>Takes time to introduce and establish additional measures</li> </ul>			
Pattern 2	After implementation of each level 2 block, implement 1 block of each level per day, regardless of mistakes	Subjects who can be expected to implement independent operation and behavior	If person absent from work understands terminology, they can prepare relatively simply by themselves	- Person supporting return to work must implement thorough practical training for the person who has been absent from work - Must be able to respond to queries from the person absent from work, if they have any questions	- Relatively easy to maintain concentration and continue work under a set of fixed conditions - For this reason, easy for the subject to understand day to day changes	The person supporting return to work does not have to implement the program as autonomously as in (1) above, but for this reason, there is a danger that they may leave it up to the subject			
Pattern 3	Implement 1 level per day	In addition to pattern 2, subjects for whom it is thought that understanding the terminology and implementation methods of MWS would be burdensome	Easy	<ul> <li>Person supporting return to work must be practically trained to understand details of MWS</li> <li>Can be implemented using merely simple instructions from person supporting return to work to subject</li> </ul>	- Easy for both person supporting return to work and subject to understand rules and implement program	<ul> <li>Same as pattern (2)</li> <li>Tasks are completed quickly, so can become bored if repeated too often</li> <li>Easily slips into merely targeting implementation of task (experience)</li> </ul>			

Chart 2: Attributes of implementation patterns for MWS training version

\*1 Understanding MWS terminology: The terminology referred to here indicates the terms used in the MWS training version ("level," "block," "trial," "baseline period," "training period," "probe period")

# (2) Future projections and issues

This research has confirmed that TP is a viable tool for use as part of a system to support persons returning

to work. However, since there are still so few examples of TP being used systematically as the basis of support for returning to work, the further storing up of examples of its utilization are required in order to improve the verified nature of its systematic benefits.

Furthermore, since this research positioned itself to consider the potential of TP to contribute to a support model for returning to work on a regional basis, it was carried out with the cooperation of related institutions and business establishments in multiple regions. The number of examples is still insufficient, but since they indicate that there is potential for partnerships through TP where new support programs are being set up for returning to work, it is important that further examples are gathered, and that the wider rollout and collection of knowhow with relation to the utilization of TP is implemented, in order to facilitate further regional partnership models.

It is thought that training in the use of TP will also be a vital element in order to promote the systematic utilization of TP and the creation of support models for returning to work that utilize TP. During the period of this research, rollout activities were developed through the cooperation of industrial health promotion centers and through study meetings held by the NIVR, but it is thought that there will be a need, in the future, to provide more opportunities for study in order that the knowledge and experience required to effectively utilize TP can be provided to businesses and persons operating in other institutions.

List of Research Reports Released by the National Institute of Vocational Rehabilitation: Regarding the *Total Package* 

No. 55 Study on the Techniques to Support Persons with Various Developmental Disabilities for Adjusting Themselves at the Workplace and at Work (2003)

No. 57 Comprehensive Study on the Vocational Rehabilitation Techniques Centered on Persons with Mental Disabilities (Final Report) (2004)

No. 64 Comprehensive Study on the Vocational Rehabilitation Techniques Centered on Persons with Mental Disabilities (Practical Guide) (2004)

No. 73 Study on a Practical Method of Task Analysis in Vocational Rehabilitation (2006)

No. 74 Comprehensive Study on Vocational Rehabilitation Techniques through Cooperation with Employers, Families etc. (Vol. 1 (Support to Employers))( 2007)

No. 75 Comprehensive Study on Vocational Rehabilitation Techniques through Cooperation with Employers, Families etc. (Vol. 2 (Support by Cooperation with Relevant Organizations))(2007)

For the Effective Use of the Total Package (2007)

No. 93 (Vol. 1) A Study on the Development of the Vocational Rehabilitation Method for Persons with Disabilities who need special care during their Transition period from Training Institutions to the Workplace (Vol. 1 (Work-Support)) (Vol. 2 (Support for Returning and Adapting to Work))(March 2010)

A handbook for usage of the Makuhari Work Sample (MWS) (2010)

A handbook for usage of the Makuhari Stress and Fatigue Assessment Sheet (MSFAS) (2010)

No. 53 The current status and issues on "return-to-work support" for workers on sick leave, mainly due to depression (through Literature Reviews) (2010)