

Full Length Research Paper

A study on the job redesign model for human resources development of mentally disabled individuals for the convenience store industry in Taiwan

Hsu-neng Chen¹, Shi-Jer Lou², Wen-chu Chiang³

¹PhD Candidate, Department of Industrial Technology Education, National Kaohsiung Normal University, Taiwan R.O.C.

²Professor, Graduate Institute of Vocational and Technical Education, National Pingtung University of Science and Technology, Taiwan R.O.C.

³Professor, Department of Industrial Technology Education, National Kaohsiung Normal University, Taiwan R.O.C.

Abstract

This study constructed a model for introducing mentally disabled human resources into the Taiwanese convenience store industry. It explored the conversion of supported employment counseling techniques for “job redesign” (of operational techniques and in-store applications) for the mentally disabled in convenience stores. This study recruited 30 research subjects and applied a mixed research method as the framework for exploring the constructed training model. A questionnaire survey and a statistical analysis were conducted to evaluate the effects; they were supplemented with observational records and interview content used to summarize various qualitative data and conclusions. The research results showed—with a job responsibility analysis and deconstruction—that designing and constructing training courses and simple aids for research subjects (based on their work needs) can allow mentally disabled employees to be productive in convenience stores. This training model is affirmed by all of the case employers, and it benefits the employment intentions of the disabled case employees themselves.

Keywords: The mentally disabled, supported employment, job redesign.

INTRODUCTION

Research background and motives

In 1975, the United Nations passed the “Declaration on the Rights of Mentally Retarded Persons,” which declared that the physically and mentally disabled should have equal opportunities and that they have the right to fully participate in and return to mainstream society. Thereafter, various countries have worked hard to provide the physically and mentally disabled with an environment with minimal restrictions and equal opportunities for development.

Both the government and employment counseling organizations in Taiwan have worked hard for the employment of the physically and mentally disabled.

There has been increased hiring of disabled people: according to statistics from August 2011 from the Council of Labor Affairs (2011), 15,151 public and private institutions obligated to hire the physically and mentally disabled in Taiwan had hired 64,910 mentally and physically disabled workers, which exceeds the legal number that must be hired (49,115). The percentage of those hired (in relation to the legally required number) is 132.16%. However, the report also shows that only 11.83% of those institutions followed the legal regulations for hiring disabled employees. In a previous study by the Council of Labor Affairs conducted in 2009, 416,765 physically and mentally disabled people were unemployed, and 32.3% of those people were capable of working. An analysis of the types of disabilities of people who have been hired show that the mentally disabled are the minority (Jian, 2000). According to a 2009 survey by

the Council of Labor Affairs, conservative estimates showed that among those who only had a mental disability, 6,815 were able and willing to work but had not been successfully employed; in addition, there would have been more available employees, but their employment intentions had been negatively affected by unfriendly employment environments. Taiwan is currently influenced by an outflow of population, an aging society, and the trend of having fewer children, resulting in an ostensible shortage of lower-level laborers. For instance, the retail service industries generally lack service personnel (Chen, 2010). In the 2009 Council of Labor Affairs survey on “the occupations that mentally and physically disabled unemployed people would most like to work in,” (Council of Labor Affairs, 2009) a significant percentage of unemployed people with a “mental disability” or an “autistic mental disability” chose “service worker and salesperson” (24.0% and 25.0%, respectively). For those with a “mental disability,” only the generic category of “non-technical labor and physical labor” was chosen more than “service worker and salesperson.” Therefore, the retail service industry has a demand that can be met with the supply of mentally disabled human resources, and this should be developed further. The focal point of this study is twofold: 1) how to help the mentally disabled improve what they can offer while improving productivity to enhance the ratio of employment for the mentally disabled in the service industry and 2) how to help businesses develop potential mentally disabled human resources.

Guan (2000) offered the following reasons for employment failure among the mentally disabled: “responsibilities,” “production,” “socialization” and “behavior.” Chen (2002) studied employment stability factors for 103 mentally disabled people using Hersheson’s work adjustment ecological system model and summarized those factors into the following categories: personal, family, workplace, and social environment. Among those, personal factors, work ability, work attitudes, communication techniques, emotional stability, and healthy bodies are all important employment considerations.

The 1997-1998 work manual for job redesign for the physically and mentally disabled by the Bureau of Employment and Vocational Training (1999) states that to remove the physical and mental functional limitations for the mentally disabled, those with multiple disabilities, and the physically disabled, it is necessary to simplify complex work and avoid operations that are too complex. Considering the infinite possibilities created by job redesign and aid development, the ROC Association for Mental Health Promotion (2000) proposed that employers and trainers should not have preconceived notions that limit the mentally disabled in specific work types or models. Since 1984, the United States has paid attention to supported employment plans for physically disabled workers. Wehman and West (1997) proposed that supported employment projects are a good way to lower

Social Security costs, lessen fiscal pressure on the government, and increase income for the disabled; in addition, Parent and Kregel (1996) found that the mentally disabled who accept supported employment projects have a higher degree of job satisfaction.

In terms of supported employment counseling techniques, Job Accommodation Network director Barbara Judy indicated that in supported employment, after counseling personnel make contact with the physically and mentally disabled, the most important ten steps in “job redesign” can allow counselors to understand and provide the physically and mentally disabled with the adjustment and support they need to work (Barbara, 1998). Regarding “job redesign,” the Bureau of Employment and Vocational Training (2003) suggested that the job descriptions provided by workplaces should be deconstructed to design work duties that conforms to ergonomic principles and can help realize the potential and capabilities of the disabled. This shows that the point of “job redesign” is for counselors to evaluate the different mental and physical characteristics of each disabled person to establish personalized training, support, and assistance strategies. It is also necessary for counselors to make accommodations for different industrial types in their work analysis. In terms of practice, Frank and Wendy (1993) proposed the theory that “supported employment has investment value,” which can lead to a broad application of the term ‘investment value.’ Comprehensive supported employment can help the mentally disabled successfully find jobs and effectively resolve personal and family burdens. In Taiwan, which has many productive mentally disabled employees, when corporations or institutions conform to employment obligations or even exceed their disabled employee quotas, they can use the “penalty” fees that otherwise would have been required (or the subsidies granted for disabled employment) to increase the value added to the human resources management of their businesses. In view of this, with direct usage of the country’s social welfare resources and resolution of its social problems, supported employment can create win-win situations for multiple parties, and “investment value” is a natural result. Thus, thinking about how to convert disabled human resources from employment “burdens” to employment “resources” should be an important issue in the “job redesign” of supported employment for disabled human resources.

In addition, considering the high degree of acceptance of the mentally disabled working as “service workers and salespeople” and the fact that the technical and physical thresholds for store cleanliness and inventory restocking are not high according to the “labor work analysis” of the human resources field for franchised convenience stores (Wang, 2006) as long as the work content is deconstructed and simplified, the mentally disabled should be able to fulfill basic work responsibilities in convenience stores (Chen, 2010). This means that for the mentally disabled who hope to engage in service work, it

is suitable to introduce them into convenience stores. As for the human resource demands of the convenience store industry, a 2011 survey by the Ministry of Economic Affairs showed that by 2010, the number of convenience stores in Taiwan had exceeded 10,000 and generally lacked a source of human resources for service duties. If other types of retail stores had been considered that number would have increased significantly. Because most service industries require manpower to provide services, the number of available personnel determines the size of the service capacity (Gu and Bao, 2007). Thus, regardless of the employment conditions and intention characteristics of the mentally disabled, given the work and job demands generated by the current Taiwanese economy, it would be suitable to counsel the mentally disabled for basic-level work at convenience stores. Therefore, this study selected convenience stores to hire mentally disabled human resources to explore the operational points and models for “job redesign” in hopes of aiding the utilization of this special type of human resource.

Research purposes

The purpose of this study is to use the characteristics of the selected franchise convenience store and the ten counseling steps by Barbara Judy to establish a standard training model (the corporation refers to it as the “Walking Angels Training Plan”) and engage in actual work and evaluation for the mentally disabled employees. The research purposes are as follows:

To explore the ten steps in job redesign for the mentally disabled’s supported employment and convert those to a content model for work in convenience stores.

To evaluate the extent of work productivity of research subjects after implementing convenience store job redesign training.

To understand the views and attitudes of counselors and store managers of convenience stores employing mentally disabled employees as they apply to the occupational training model for mentally disabled human resources.

To evaluate the changes in work ability and willingness to work of the mentally disabled employees at the convenience stores after they have undergone job training specifically designed for mentally disabled human resources.

Research design and implementation

Research subject

There are a total of 30 research subjects who are mentally disabled (henceforth referred to using their case numbers ranging from “Case 1” to “Case 30”). They were hired by convenience stores classified as being in the service

industry. The data on the personnel are as follows:

Age distribution is between 25 and 39. Among them, 16 are female, and 14 are male. 27 are mentally disabled, 1 is autistic, 1 has a rare disease (with mental problems), and 1 has multiple disabilities (cerebral palsy and slight mental disability). Except for the one with autism and the one with a rare disease, the other 28 are identified as follows: 1 is severely mentally disabled, 6 have medium disabilities, and 21 have slight mental disabilities. Their average WISC IQ is 67; the highest is 70, and the lowest is 30.

Other than Case 5 and Case 7 (who have both worked in wholesale stores and department stores for over a year), the other 28 have only had short-term work (21) or no work experience at all (7). Case 5 left his previous job because of problems with “interpersonal relationships,” while Case 7 left the previous job because “the factory already end business.”

RESEARCH METHOD

This study uses mixed research methods, including a questionnaire survey, on-site observation records, and semi-structured interviews to achieve triangulation of data. The research framework and procedures involve the following 9 steps:

1. Collect basic data on research subjects and establish personal files based on different stores.
2. Complete the “Walking Angels Training Plan” for the corporation based on the job redesign concepts of Barbara Judy, which was developed for mentally disabled employees to be used in on-site training. Organize the content and the cases.
3. During the period of collection and research, the employer (the convenience store manager), corporate human resource directors, and the counselors conduct on-site observation and collect evaluation data for the hired employees.
4. Develop the corporation’s “Walking Angels Training Plan” effect evaluation questionnaire.
5. Develop a work stability evaluation scale for physically disabled employees.
6. Implement, compile, and analyze the questionnaires and evaluation charts.
7. Design a semi-structured interview outline based on quantitative data and conduct interviews.
8. Compare case data, organize on-site observation and interview text records, engage in commentary and present the results.
9. Write and present research report.

In addition, this study uses qualitative (qual) data to confirm and expand the design of the quantitative (QUAN) results. It also uses a “verified quantitative data model” of “triangulation design” in mixed method research to develop the research flowchart. During the stage of developing tools to collect quantitative data (various

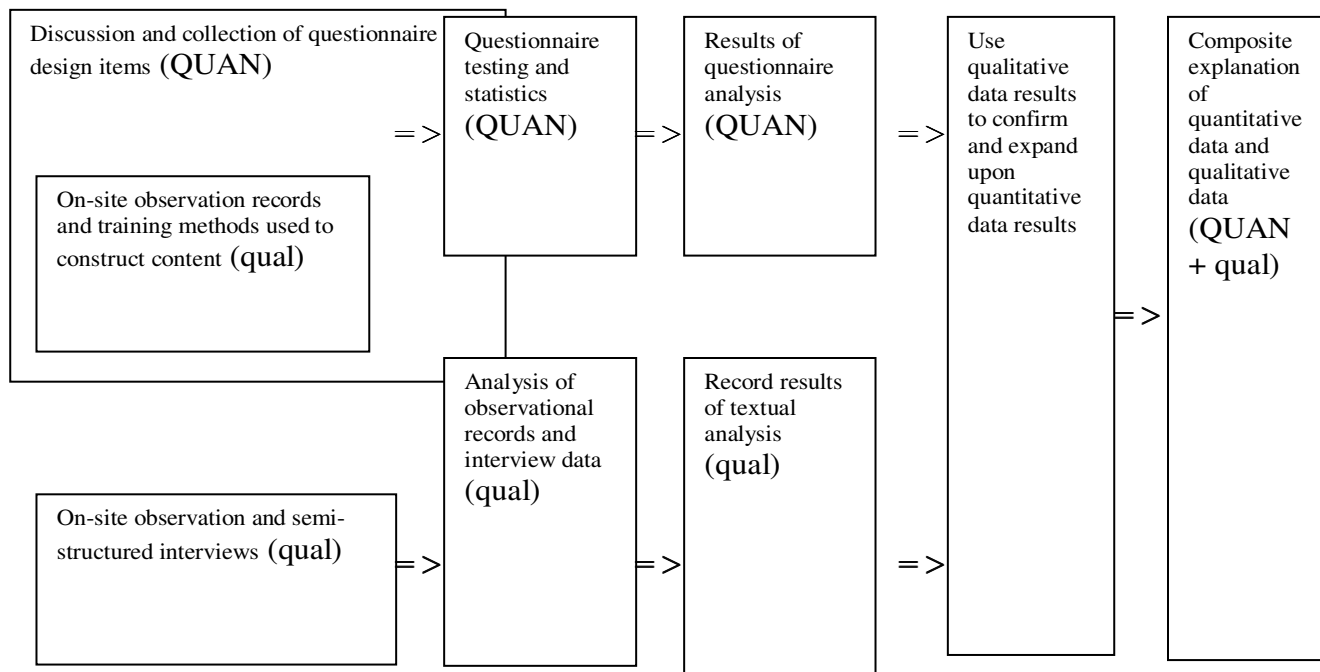


Figure 1. Mixed method research flowchart

Source: designed by the researcher with reference to “mixed method research” (Creswell and Clark, 2010).

questionnaires), the researcher transforms the flowchart and adds “embedded data” from mixed method research to obtain “mixed data” (see Figure 1).

Research tools

Walking Angels Training Plan: The researcher and counselors convert the 10 steps of “job redesign” (proposed by Barbara Judy) to establish counseling and implementation projects suitable for mentally disabled employees in convenience stores. The overall plan is also divided into 10 steps, and during the research period, it is implemented for all research cases as part of the counseling and training process.

Mentally disabled employees’ “Walking Angels Plan” effect evaluation questionnaire: A five-point scale with 10 questions is used. It is completed by store managers. The questionnaire’s reliability (alpha value) is 0.914, which is greater than the standard of 0.7; four experts completed the validity evaluation.

Work stability evaluation questionnaire for mentally disabled employees: This uses a five-point scale with 10 questions. It is completed by the mentally disabled employees. The questionnaire’s reliability is 0.746, which meets the requirements; its validity was also evaluated by four experts.

Semi-structured interview outline: This study

supplements the quantified data using a semi-structured interview outline for interviews.

RESEARCH RESULTS

Establishment of walking angels plan counseling framework

The researcher and the employment counselor enter the site at the beginning of the research period. After observing and discussing the work content of convenience stores and practices by the mentally disabled, the ten steps of “job redesign” proposed by Barbara Judy are converted to establish the ten steps of this counseling and training plan (shown in Table 1).

Implementation of Walking Angels Training Plan

After establishing the content of the Walking Angels Training Plan, the researcher counsels and observes the ten steps and their cycles with the 30 research subjects at the convenience stores. Because the research subjects have different degrees of disabilities, there are different work post arrangements and different numbers of cycling through the Walking Angels counseling procedures. Cases 5, 8, and 14 with slight, medium, and severe

Table 1. Steps comparison chart of walking angels training plan and job redesign

10 steps of Job Redesign	10 steps of Walking Angels Training Plan
Step 1: Define the problem	Explore personal characteristics and counselor opinions to define the current problems (one at a time).
Step 2: Work adjustment	Deconstruct and restructure the work content. Use the work post as the unit of adjustment rather than the position (for instance, sweeping the floor, mopping the floor, restocking, and cashier).
Step 3: Equipment adjustment	Focus on problem-solving and use existing tools or equipment to facilitate the adjustment of work content.
Step 4: Use aids	If work cannot be conducted smoothly after adjusting existing tools or facilities, then develop and train on the use of aids.
Step 5: Make the aids applicable to different situations	Conduct on-site evaluation of the usefulness of aids used for the same task, but at different times and in different places.
Step 6: Adjust aids	Conduct on-site evaluation of aids and adjust the aids or the methods for using them.
Step 7: Design new aids	If work still cannot be carried out after adjusting aids, develop new aids.
Step 8: Change job descriptions	Train for needs based on the work post or evaluate reasons for unsuitability. If needed, alter work content.
Step 9: Review evaluations and redefine	Based on personal traits, counselor opinions, practice at work post, and unsuitable work content, delineate the current problems (one problem at a time).
Step 10: Maintain job redesign	Based on new problem definitions, the store manager cycles through the Walking Angels Plan with the counselor and the human resources supervisor until the employee can perform in accordance with the demands of the work post.

degrees of disability, respectively, are used to describe implementation of the steps, and the research results of each stage and their content are shown as follows:

Define the problem

1. Work analysis: The work at the research site convenience stores includes the following 11 major categories: ordering merchandise, stocking merchandise, restocking merchandise, inventory, cashier, cleaning, safety management, bookkeeping, quality assurance, human resources, and public relations. At first, the research subjects worked in the following five major areas: stocking, restocking, cleaning, quality assurance, and cashier.

2. Work problems: When working in the five major work types listed above, the research subjects generally had these problems: "unable to distinguish the expiration dates for short-term drinks," "poor memory for restocking

or slow actions, only taking a few items back from the warehouse," "poor memory, forgetting where one has mopped on the floor and then getting lost," "insufficient vocabulary, difficulty reading the work shift log," "unintentionally getting in the way of customers when mopping the floor or when restocking," "poor distribution of work time and grasp of the procedures, easily forgetting or taking too long," and "occasionally counting the change incorrectly." Among them, the most unique problem involved an employee with cerebral palsy, who has palm deformities and cannot restock the refrigerators with narrower shelves. As for Case 5, who has a serious psychological disability, he has slow reactions and movement, so he can only carry one item at a time when restocking from the warehouse. Although Case 8 has a medium-level mental disability, his memory is poor, so an interruption in mopping would cause him to forget his previous location and the direction in which he needed to continue. Case 14 has a slight mental disability; his main problem is poor time distribution and a poor grasp of



Figure 2. Refrigerators with narrower racks



Figure 3. "Drawer-style racks" that can be pulled out

procedures, so he easily forgot things or exceeded the standard time needed to complete jobs.

Work adjustment

After deconstructing and restructuring the work content, the research subjects' work in convenience stores included "stocking and restocking," as well as "cleaning," which should be divided into the following work items: "wiping and sweeping," "equipment cleaning," and "organizing arrangements." "Equipment cleaning" is more difficult and less suitable for mentally disabled employees. Additionally, slightly disabled people with higher functioning can participate in quality assurance and cashiering. More specifically, quality assurance is divided into "equipment checking and recording" and "picking out and checking for expired items," while cashiering is divided into "product sales" and "payment receipt services." Among those, "equipment checking and recording" and "payment receipt services" are more difficult and require additional work post adjustment. Case 5 and Case 8 worked on restocking and floor-mopping, which are both basic and do not require adjustment; Case 14 did not have problems with basic work but avoided "payment receipt services."

Equipment adjustment

Eighteen tools and pieces of equipment underwent adjustment during this study, including additions to the work shift chart, usage of both dry and wet mops, and usage of the cashier and change machines. For the more unique problem experienced by the employee with cerebral palsy who was unable to restock the refrigerators with narrower racks (see Figure 2), the store introduced "drawer-style racks" (see Figure 3) that do not require

stretching one's hands into the rack, thus resolving the problem.

At this stage, Case 5 and Case 8 did not need equipment adjustments, while Case 14 added work item reminders on the store shift chart.

According to the statistical research results, there were 15 items related to adjusting ineffective tools and equipment or adding tools and equipment for support, including work shift log reminders, shopping baskets for restocking, sticky note reminders, and checklists for nearly expired merchandise. Case 5 used the shopping basket to increase the restocking volume in each instance (see Figure 4), Case 8 was given sticky notes to carry around and stick on the edges of the merchandise racks during interruptions to floor cleaning to remind him of his locations, and because the original work shift chart rows were too small, store work shift logs with work procedures were used as reminders for Case 14. To assist personnel who have difficulty reading the work shift logs, the study refers to the experiment by Todd and Tracey (2006) on students with reading difficulties as well as the research by Sporer, Brunstein and Kieschke (2009). The business owners also assisted counselors in conducting reading ability training with "reciprocal teaching;" this is another example of an "aid."

Make the aids applicable to different situations

After on-site evaluation of the usefulness of aids used for the same task but at different times and in different places, it was found that the eight aids (including sticky note labels, work shift logs, shopping baskets, and checklists for nearly expired merchandise) produced different effects when used in different situations. For instance, Case 5's shopping basket did not meet the requirements for large restocking volumes during peak hours when customers frequent the store. When the sticky notes fell off, Case 8



Figure 4. Use a shopping basket to increase the restocking volume in each instance

often got lost. Case 14 frequently forgot to read the work shift logs or forgot what had been read right after reading it.

Adjust aids

On-site evaluation and summarization shows that among the eight aids listed above, there were still five that needed to be adjusted (either the aids themselves or their usage methods). For Case 5, the store manager asked him to use the dairy products box instead of shopping baskets, but this barely increased the restocking volumes per instance during peak hours. Case 8's sticky notes not only fell off easily but also caused an environmental problem because they cannot be recycled. Thus, as with Case 14, whose original aid did not work, new aids needed to be developed.

Design new aids

After these five aids were adjusted to no avail, development and operational training were conducted for new aids. The results for developing new aids for the three cases are as follows:

Case 5: An aluminum multi-level restocking mobile cart (shown in Figure 5) paired with training for "copying item names" can effectively increase the amounts of merchandise restocked in each instance.

Case 8: Attach binder clips to the side of the merchandise rack; these serve as the markers to indicate where mopping stops due to interruptions.

Case 14: An alarm clock is provided, and an alarm goes off before each work time.

Change job descriptions

Other than the five foundational jobs, the extent of job change was not substantial for most research subjects. The job descriptions only changed for Cases 25, 26, 27, and 28, who had higher capabilities: they were originally working as cashiers, but afterwards, they were selected to check the inventory at various stores. For Cases 5, 8, and 14, there was no need to change their job descriptions.

Review evaluations and redefine

Research at this stage shows that for the 14 research subjects who used the 5 new aids, there were two aids (binder clips and alarm clocks) for three research subjects (Cases 8, 14, 19) that required engaging in another counseling cycle for this job redesign. As for Case 5, after using the aluminum multi-level restocking mobile cart and training on "copying the items," he could effectively increase the amount of items he restocked per instance. However, the other two did not improve much. Although Case 8 used binder clips and could effectively label where he stopped mopping the floor, he still occasionally forgot whether the direction should be right or left at that point; although Case 14 could be reminded of his next work time with the alarm clock, he could not remember the work content and still needed to spend time flipping through the work procedure chart in the original work shift logs.

Maintain job redesign

According to the newly defined problems, the store managers, counselors, and human resources directors



Figure 5. Aluminum multi-level restocking mobile cart



Figure 6. Binder clips with directional arrows

needed to conduct counseling and execute training steps 1 through 9 of the Walking Angels Plan for Cases 8, 14, and 19. After the second cycle, the performance of the three research subjects met work post requirements, which are described below:

A. In the “adjust aids” stage of the second cycle, arrow labels were pasted to Case 8’s binder clips (see Figure 6) to note the direction for continued mopping, so the problem of forgetting the mopping direction was resolved.

B. Regarding the problem for Case 14 and Case 19—who still needed to spend time flipping through the work shift logs after alarm reminders to determine their work content—the researcher referred to the advantages of digitized history files by Gaide (2006) and the creativity

of Williams (2007) in using multimedia, such as sound, in digital format storage and presentation. At the “design new aids” stage, the two cases input work content into cell phone notepads with alarm functions to resolve the problem (see Figure 7).

Walking Angels instructional training course effect evaluation questionnaire results

The researcher finds that the Walking Angels Training Plan not only benefits work adjustment for cases but can also help develop aids to overcome obstacles and problems in personal work. Among them, the evaluation

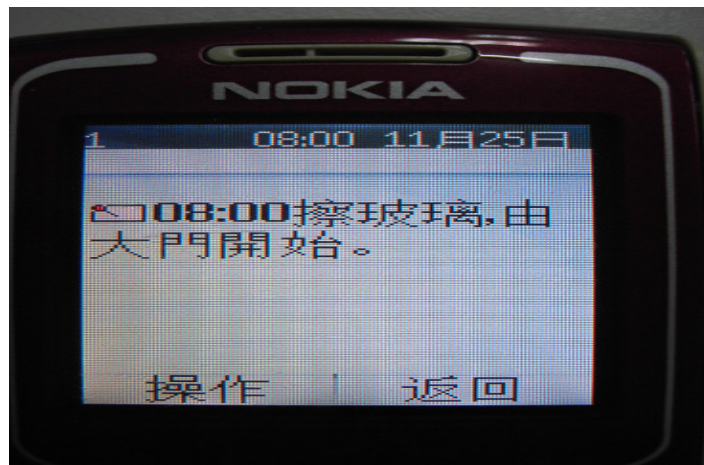


Figure 7. Work content reminders in the cell phone notepad with alarm functions

data are shown in Table 2.

An analysis of Table 2 based on high and low scores can be used to deduce that all the employers believe that it is necessary to implement the “Walking Angels Plan” for the angel employees; they also indicated that the content is appropriate. However, for the third item (“increase in active work behavior”), the mean is 4.033, the standard deviation is 1.285, and among the store managers, five of them had a “neutral” opinion, whereas two marked “disagree.” The opinion responses and subjects for this portion are the same in item 7! The researcher conducted interviews and discovered that the store managers for Cases 7 and 11 were not satisfied with the work attitudes of those two employees, believing that they needed improvements: “XXX can now clean the glass faster, but after cleaning the glass he often goes outside and zones out” (#S070921); and “it takes him over an hour to mop the floor, and he won’t do anything even if the store needs restocking” (#S110701). This result corresponds to the findings by Guan (2000) and Chen (2002) regarding the influence of work attitudes on employment factors of the mentally disabled. Currently, the job redesign content for walking angels lacks counseling on the cultivation of “work attitudes;” this is worthy of consideration in a future study.

Another item with relatively lower scores is “improvement in work knowledge”: the mean is 4.167, the standard deviation is 1.912, and among respondents, 10 highly agreed, 15 agreed, and 5 selected “neutral.” The most representative interview response is the following: “he is very diligent, and I want to train him in important work such as quality assurance, but he can’t read the expiration date, and often picks the wrong products or misses expired products” (#S191009). Regarding this point, there are 9 ways of labeling expiration dates for store items, and some have English or different

sequences for days, months, and years, so this can pose a challenge for the research subjects. However, regarding the expiration date, the researcher believes this can be overcome when the industry integrates product expiration dates.

Finally, the questionnaire results that are most supportive of the program indicate that all the store managers are willing to continue hiring disabled employees (mean: 4.900): 3 expressed agreement, 27 expressed high agreement, and the standard deviation is 0.697. Their opinions were quite uniform and there was a high degree of overall agreement.

Work stability evaluation scale for mentally disabled employees

This study also investigated and analyzed the willingness to work and other work satisfaction items among the 30 mentally disabled employees. The data regarding those items are shown in Table 3.

Table 3 shows that the research subjects “like this job a lot” are satisfied with instructions from the store managers. For instance, one respondent said, “the store manager is worried that I would forget to help in quality assurance, so he gave me a notebook so I can put it in my pocket so I can remember the time; hehe! I forgot to take it out to look at it (so I often forget to do it on time); now he taught me to use the cell phone to record it, so smart” (#S190612); another said, “using newspapers to wipe the glass really makes it very clean, the store manager taught me.” (#S020711)

The researcher can also sense the reliance of mentally disabled employees on their store managers. However, unlike their positive interactions with the store managers, the research subjects gave relatively lower scores for

Table 2. Disabled employees' evaluation of the benefits of walking angels counseling and training

Item	Mean	Standard Deviation
1. Necessity of walking angels counseling and training	5.000	0.000
2. Suitability of walking angels content	4.900	0.697
3. Increase in active work behavior	4.033	1.285
4. Increase in work concentration	4.800	1.239
5. Increase in work endurance and continuation	4.800	1.239
6. Conform to the requirements for completing work	4.900	0.697
7. Improvement in work attitude	4.033	1.285
8. Improvement in work techniques	4.933	0.483
9. Improvement in work knowledge	4.167	1.912
10. The value is continued employment	4.900	0.697

n=30

Table 3. Evaluation of work stability of disabled employees

Item	Mean	Standard Deviation
1. I like this job a lot	4.933	0.483
2. I know myself better and I know how to introduce myself	4.167	1.912
3. I learned how to work with colleagues	3.433	2.343
4. My acceptance for instruction from the store manager	4.900	0.697
5. I understood while learning and practicing	4.667	1.721
6. I am more confident about future work performance	4.800	1.239
7. After doing this job, I like myself better	4.167	1.912
8. When I am on break, I can chat with all the other colleagues	3.367	2.311
9. I feel happy working here	4.667	1.721
10. I want to keep working	5.000	0.000

n=30

items 3 and 8: the mean values are 3.344 and 3.367, with standard deviations of 2.343 and 2.311, respectively, which show that the respondents disagreed with the statements. For items 7 and 9, they selected "neutral," while those who marked "disagree" were the same five people for those two items! This shows that the research subjects only focused on communicating with the store managers and are worse at interacting with colleagues. In this portion, the most significant interview responses were: "XX worked so fast, I was still cleaning the glass, and she already finished sweeping the floor; she would nag if the newspaper pieces (for wiping the glass) fell on the ground" (#S160803); and "ah, I don't know what to chat with them about! They all sit together for meals, and I don't understand what they are chatting about" (#S250915). The other store personnel reacted with responses such as "there is too much to do in the store, and everything has to be done in order, XX is too slow, and has to work harder!" (#C160803) or "XX just smiles, I don't know what to talk to him about" (#C250915). This shows that because they are so busy, the store personnel do not have time to deal with mentally disabled employees, plus the research subjects are lacking in

communicative abilities. In summary, the researcher believes that even though the job redesign plan does not discuss communicative ability, if the work efficiency of the mentally disabled can be enhanced, then with the help of increased productivity, other personnel will have more time to interact with them. For instance, in an interview for Case 23, one store employee stated, "XX talks very slowly, but he is the treasure of our store! He helped me and the night shift so much" (#C200819); this is a positive case.

In addition, 100% of survey respondents indicated a desire for "continued employment," which shows that the disabled employees have a high sense of identification with the counseling content in the "Walking Angels Training plan".

CONCLUSION AND SUGGESTIONS

The results from the on-site evaluation, the questionnaire statistics, and an interview analysis in this study have produced four conclusions corresponding to the research purposes:

1. The 10 steps for job redesign in supported employ-

ment for the mentally disabled can be easily converted for use in convenience stores, and the content model also has ten corresponding steps.

2. After job redesign counseling and training through Walking Angels, the research subjects can perform like normal people when doing basic work. This means that they can be productive workers in convenience stores.

3. All store managers and counselors believe that it is necessary and suitable to implement the "Walking Angels Training Plan" with the disabled employees and that this training model with job redesign functions is very beneficial for elevating work capability. The only things that the research subjects need to strengthen are their work knowledge and attitudes.

4. The disabled employees also believe that the "Walking Angels Training Plan" training plan and the concept of job redesign can improve the development of their work ability and their employment stability; however, they still need to work on their interpersonal interactions.

After making observations, conducting interviews, and compiling various views, the researcher proposes three suggestions:

1. Currently, the promotion of mentally disabled human resources is still difficult, and corporations that have not met the regulated standards for hiring do not understand the resource efficacy of this group of people, so they are very conservative in their hiring attitudes. This study has established counseling and training frameworks for the convenience store industry, which in the future can be replicated and applied in other stores; other industries can also convert this model for usage.

2. To expand the functions and benefits of this training model beyond work capabilities, other workplace elements such as work attitude and interpersonal communication should be addressed in job redesign for convenience store employment of the mentally disabled. Other store workers should also be trained on communicating with the mentally disabled to improve overall interpersonal communication.

3. Regarding the insufficient knowledge of mentally disabled employees that can affect the ease of their jobs, it is suggested that in addition to including counseling in job redesign, employing corporations should also enhance the efficiency of store operations (e.g., create uniform formats for merchandise expiration dates). This not only decreases the learning burden on mentally disabled employees but can also enhance the productivity of other employees.

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