Method

We carried out a questionnaire and read three papers.

Questionnaire

First of all, we investigated how many people talk themselves while they work. We carried out a questionnaire on twitter. Question sentence is “How often do you work while talking to yourself while working in your room?”.

About 95% people selected “often” or “sometimes”. It can be said that many people sometimes or more work while talking to yourself while working in your room.

Analysis of learning process of action series

This research considers the acquisition process of exercise as a problem solving process and can examine concrete method to analyze it in detail. First, we aim to collect preliminary and basic data on how subjects deal with such tasks.

・Experiment

[Subjects] 8 (College students and raduate students)

[Exercise] "A series of actions are repeatedly presented to the VTR so that you can remember it as quickly as possible, the way you remember is freedom, you can view the VTR any number of times and pause it. Try to run it in front of the video camera if you feel completely remembered by yourself ".

・Results and Consideration

1) action

The subject's action was observation or imitation. Imitation's behavior is to approximate the exact one by imitating the memory inside of you by ambiguous action.

2)word

All of the subjects saw utterances synchronized with motion and utterances that confirmed themselves.

・Conclusion

From these results, it was found that subjects were able to deal with tasks in various ways when the learning of the action series was regarded as a problem solving process, and that the method was diverse.

Function of soliloquy while performing exercise task

In this research, we will examine soliloquies in problem solving exercise task scenes of acquiring action series for adults.

・Experiment

I asked the subjects to remember the action series (10 seconds) repeatedly presented by the VTR and asked about the difficulty after completion.

・Result

The soliloquy could be classified into three types: self-regulatory, self-reinforcing and whispers. Comparing the feeling of difficulty of the group with many spoken utterances and the difficulty group, the difficulty of the utterance multiple group was high only for the item "I thought it was difficult to remember at the beginning of the task".

・Consideration

It was speculated that the ability to "temporarily hold" the impression of a visual image captured visually in soliloquizing until the start of its own action is particularly effective.

Effects of verbalization of thinking process on insight problem solving

This research considers whether meta-utterance within task will promote resolution of task, and verifying whether the verbalizing method this time encourages can produces many meta-utterances. In this time, the verbalizing is done by soliloquy or speaking.

・Experiment

Subjects solve a puzzle called T puzzle. Subjects are divided into four groups: solving puzzle alone quietly, solving alone with soliloquy(verbalizing), solving with speaking(verbalizing) to partner about solving process, and solving while consulting with partner.

・Result

There was no difference in ability to solve insight problem among groups. The person with more meta-utterance in any group had higher ability to solve insight problems.

・Consideration

It turned out that the meta-utterance in the task promotes resolution of task and that the verbalizing method promoted this time is not appropriate.