Abstract

This paper discusses the difference between the performance of the motor control function of the persons with a trend of the immediate response syndrome and the ones without it. The authors introduce the visual synchronization task to measure the performance of a motor control function. The visual synchronization task enables to estimate the performance of motor control function precisely. The task needs only 15 seconds to perform. Therefore, the task makes a little effect about the status of a subject. With the questionnaire about the immediate response syndrome, subjects with the tendency of the immediate response syndrome. The visual synchronization task measures the performance of the motor control function of the subjects. In our experiments, the subjects with the tendency of the immediate response syndrome show an apparent decrease of the performance of a motor control function measured by the visual synchronization task.

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1. Introduction

The trend of the immediate response syndrome is the problem about the response to the stimulus in social network services (SNS). Kanoh [1] [2] discussed the problems about the immediate response syndrome.

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A person with the trend of the immediate response syndrome has a psychological problem that the person cannot control a desire to response immediately to SNS messages. The psychological problem is on the social relationship. The psychological problem may influence wider region of brain functions. We do not have enough knowledge about the range of the psychological problem about the immediate response syndrome.

The immediate response syndrome is a cognitive disorder in a time-scale from five minutes to a few hours. Our motions for instance a walking are in a time-scale from tenth of a second to a few second. Therefore, our motor control function works in a time-scale from tenth of a second to a few second. The time-scale of the immediate response syndrome is over ten times of the time-scale of the motor control function.

This paper discusses the relation between the tendency of the immediate response syndrome and the motor control function. The immediate response syndrome is a cognitive disorder in a response to a stimulus in a social relation. The motor control function is the control function of our body movement in a response to a stimulus in physical relation.

We can have many possibilities about the relation between the immediate response syndrome and the motor control function. One possibility is that the performance of a motor control function does not relate to the tendency of the immediate response syndrome. The other is that the motor control function relates the tendency of the immediate response syndrome. If there is a relation between the visual synchronization task and the immediate response syndrome, the relation may be weak. To find the relation between motor control function and the tendency of the immediate response syndrome, we need a keen estimation method to evaluate the performance of our motor control function.

Aoki, et al. [3] [4] [5] have developed the method to evaluate the response to the visual stimuli that we call a visual synchronization task. The method is keener than the classical tapping test. Therefore, this paper shows the relation between the performance of the visual synchronization task and the tendency of the immediate response syndrome.

The visual synchronization task is a process of motor control function in a time scale from one hundredth of a second to 15 seconds. The time-scale of the immediate response syndrome is twenty times of the time-scale of the visual synchronization task at the nearest point.

This paper shows the effect on the performance of a motor control function measured with the visual synchronization task from the trend of the immediate response syndrome. The effect to the motor control function from the trend of the immediate response syndrome may be tiny. Therefore, we need a method that estimates the performance of motor control function precisely. The visual synchronization task measures the performance of motor control function precisely. It needs only 15 seconds to perform. Therefore, it makes a little influence on the motor control function of a subject with its measurement.

This paper indicates the difference between the response in the visual synchronization task and the one in SNS. The visual synchronization task measures the response to the visual stimuli in a period of 15 seconds. The trend of the immediate response syndrome is in a period of three minutes and more minutes. There is a difference of more than tenfold between the time-span of the visual synchronization task and one of the immediate response syndrome.

First, this paper discuss the trend of the immediate response syndrome in social network services. Then, the authors introduces a visual synchronization task and its performance measuring method. Next, we discuss our experiments and their results. And last, the authors conclude this work.

2. The trend of immediate response syndrome and its’ measure

2.1. Immediate response syndrome

We commonly understand that the trend of immediate response syndrome makes bad effects to a person. The person cannot stop to response to a mail instantly. The person also cannot stop to check SNS. In the way, the one has difficulty to make other important activities.

Some persons feel that the quick reply (response) to an email or SNS posted by a friend itself is a proof of their friendship. They do that the person who responds so quickly must be a close friend.
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