

Title	外国語使用時と母語使用時における客体的自覚の相違
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# Differences in objective self-awareness between second language and native language use

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More and more people, nowadays, use a second language for study, research and business. According to the survey of the Ministry of Health, Labour and Welfare, there are nearly 700,000 foreigners working in Japan. It is necessary to reflect how their works were in order to improve themselves for foreign workers by using Japanese. People have to focus their attention to themselves objectively for the reflection. We call the state in which people focus their attention on themselves objective self-awareness. In this state, they evaluate and compare their current behavior against the standard of the ideal self. Peoples' emotions are negatively affected if they do not live up to the standard of their ideal self (Duval & Wicklund, 1972). It has been confirmed that emotions such as guilt and embarrassment are in fact weakened when using a second language (Caldwell-Harris & Ayçiçeği-Dinn, 2009). We expect that if negative affect is weakened while using a second language, peoples' adaptive behavior motivated by negative affectivity will be reduced. We expect also that negative affect is weakened when using a second language, one possible reason is the reduction of objective self-awareness. It may be difficult for the second language speakers to image ideal self of them or reflect about themselves, even in situations where people understand word meaning of the second language. If we knew whether, objective self-awareness is reduced, while using a second language. This study can be expected to be applied in the field of researches and business.

In objective self-awareness state, they evaluate and compare their current behavior against the standard of the ideal self. Peoples' emotions are negatively affected if they do not live up to the standard of their ideal self. The desire to reduce this negative affective state

motivates adaptive behavior that is more consistent with the standard of the ideal self (Duval & Wicklund, 1972). The purpose of this study is to reveal whether, while using a second language, objective self-awareness is reduced, and whether negative affects are weakened, as well as whether the motivated adaptive behavior is reduced.

Vallacher and Solodky (1978) have demonstrated that people are more likely to align their behavior with the standard of their ideal-self when objective self-awareness is induced. The experiment involves the solving of line-tracing puzzles. In this experiment, objective self-awareness was induced by mirrors or voice recordings of the self, and was recorded for half of the participants.

In our study, we designed a similar experiment involving the judgment as to whether the demonstrated line-tracing puzzles could be solved or not. Specifically, we corresponded the use of native language and second language, respectively, to whether objective self-awareness was aroused or not. Forty graduate students (20 Japanese, 20 Chinese) of JAIST participated in the experiment. Japanese and Chinese were used as the native languages, and English as the second language. Participants had mainly acquired the second language in a classroom setting, and did not have a parent who spoke it as a native language. Two conditions were set as follows: (1) whether the instructions were written in the native language (Japanese/Chinese) or second language (English); (2) whether the standard of ideal self was given or not. For the latter condition, the words, “You can solve the puzzles in this task with normal concentration. The accuracy of identifying the puzzle in this task by 14–15-year-old middle school students in Japan was 89.2%” were shown on the instruction sheet when the standard of the ideal self was given. Under this condition, the participants would like to achieve higher scores than middle school students in order to live up to their standard as graduate students. Participants were randomly assigned to four groups accordingly: native language with ideal self presented (n=10); second language with ideal self presented (n=10); native language without ideal self presented (n=10); and, second language without ideal self presented (n=10). Setting the no ideal self presented condition as a control condition, we investigated whether objective self-awareness, negative affectivity, and adaptive behavior would be reduced while using a second language in the ideal self present condition. We used the Situational Self-Awareness Scale (Govern & Marsch, 2001) to measure the degree of objective self-awareness.

Two questions were set: “Is it embarrassing if you do not solve the solvable puzzles?” and “Did you feel the pressure while solving the puzzles?” An answer closer to negative implies weaker negative affect.

Since the ideal self can be considered as solving most of the puzzle questions correctly,

the adaptive behavior can thus be considered as solving as many puzzles as possible. However, since the puzzles in this experiment were difficult to solve in a limited time, the participants were likely to solve them incorrectly. If adaptive behavior was reduced while using a second language, we can observe that the participants would solve fewer puzzles than native language groups.

A 2 (native language/second language)  $\times$  2 (ideal self presented/no ideal self presented) ANOVA was conducted on objective self-awareness, negative affect, and adaptive behavior. The main effects were on objective self-awareness, negative affect, and adaptive behavior.

The main effect was found for the language factors “number of solved” and “number of solved incorrectly,” representing the adaptive behavior. Significantly, the number of solved questions under the second language condition was fewer than under the native language condition, showing that adaptive behavior was reduced while using a second language.

We analyzed the simple primary effects of “pressure” and “embarrassment” belonging to negative affectivity. Arousal of “pressure” and “embarrassment” under the second language condition was significantly closer to negative than under the native language condition, implying that negative affect was reduced while using the second language.

A main effect occurred in the language factor “objective self-awareness” on the objective self-awareness scale. Significantly, objective self-awareness under the second language condition was weaker than under the native language condition, showing that objective self-awareness was reduced while using a second language. For the ideal self presented group, two questions, “Do you think the accuracy rate of the middle school is high?” and “Did you care about the accuracy rate of middle school students?” were presented in the questionnaire. While there was no significant difference between language factors for the first question, there was a significant difference between language factors for the second question, demonstrating that the participants under the native language condition cared more than those under the second language condition. The participants who were using a second language were aware of the standard of the ideal self at the same level as the participants who were using a native language, but this kind of consciousness did not direct them to adapt sufficiently to the standard of ideal self.

A correlation was found between objective self-awareness and adaptive behavior. In addition, correlations were found between objective self-awareness and negative emotions in the ideal self presented group, and also between negative affectivity and adaptive behavior. According to the objective self-awareness theory, objective self-awareness was reduced while using a second language, causing weaker negative affect, which could not sufficiently motivate adaptive behavior.

In this study, participants challenge line-tracing puzzles task while using second language and native language. As results, objective self-awareness, negative affect adaptive behavior is reduced while using a second language. This result suggests there should be a method to help second language speakers to reflect themselves in daily life.