

# How do Japanese conceptualize free will?:

## A case study of the free description method

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人々は自由意志をどのように概念化しているか？—自由記述研究を通じて—

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### 要約

自由意志に関する信念は責任帰属や自己コントロールなど、われわれの社会生活で重要な機能を果たすことがこれまでに提起・実証されている。しかし、「自由意志」が何を意味するのか、という根本的な問題について、個々の研究者の想定は異なっている。そこで、本研究は人々の自由意志概念を構成する具体的な要素について、Monroe and Malle (2010) にもとづき、自由記述の方法を通じて検証をおこなった。大学生 301 名の回答をコーディングした結果、人々の自由意志概念の主要な要素は他行為可能性（「複数の行為が可能である」ということ）、行為者性（「自分の心理状態が行為を引き起こす」ということ）、制約からの自由（「内外の要因に制約されずに行動する」ということ）の3つであることが明らかになった。つまり、人々にとって自由意志とは、「何ものにも拘束されず、自分の心理状態にそって行為を選択する」ということを基本的に意味すると示唆される。これらの結果にもとづき、考察では心理学の先行研究や哲学領域の知見との整合性について議論した。

### Key words

free will, free description, alternative possibilities, agency, freedom from constraints

## 1. Introduction

### 1.1 Problems of free will

Can we freely choose our actions? Intuition tells us that we can do it without any question. When we get hungry, we decide what and where to eat. When we go traveling, we decide where and when to go. In many cases, these actions seem not to be determined by others, and we feel that we have free will to choose our behaviors. However, social psychology research indicates that our actions are more affected by others and environments than we intuitively think. For example, the classical experiments conducted by Asch show that people conform to others even when they have an unshakable conviction (Asch, 1955).

When our actions are affected by others and environments, what would be the problem? The most important and controversial issue is an impact on moral responsibility. That is, it seems that if our actions are not freely chosen by ourselves, then we are not moral responsible for our actions. For instance, when a person from a troubled family background commit an outrage, is he or she morally responsible for it? It is likely that we hold them less accountable if we know the powerful influence of others and environments underlying the outrage. Free will is thus closely linked to moral responsibility and, therefore, whether we act of our own free will becomes a serious problem in everyday

life or even in court. However, given that such everyday impact on moral responsibility hinges on how people understand free will, clarifying the naïve understanding for free will should be a major priority.

### 1.2 Researcher's concept of free will

What does the concept of free will mean for the lay people? When searching for the words of free will in a book or on the internet, there are huge linguistic expressions such as “actions are based on free will” or “you took on the responsibility of your own free will.” Hence, people seem to have a good understanding for its meaning, and the words of free will is a genuine part of their vocabulary in daily conversation. However, when people are asked to give the definition of free will, they might provide a variety of answers due to the abstractness and complexity of the concept.

Even philosophers, who have been debating free will for centuries, do not have a conclusive answer about its definition. Still, the definition of free will can seemingly be categorized into two main cases: ability to do otherwise and a sort of agency. Roughly speaking, ability to do otherwise signifies that multiple actions are possible (e.g., Ayer, 1954; Descartes, 1644; Kane, 1996; Van Inwagen, 1983), while agency fundamentally means that one's own psychological state causes the action (e.g., Frankfurt, 1971; Fischer & Ravizza, 1998; Hume, 1739).

On the other hand, the issue of free will has been receiving much attention in recent years in the field of psychology. In usu-

al psychological surveys, researchers first define the concept of free will and then create a scale (question items) based on such a concept in order to investigate the participants' beliefs in free will or the relationship between this belief and judgment/action. For example, Paulhus and his colleagues defined free will to be constructed from an internal locus of control and moral responsibility, then created a free will scale including those two subordinate concepts (Paulhus & Carey, 2011). In addition to this scale, several other scales have been developed in the field of psychology (Deery, Davis, & Carey, 2015; Nadelhoffer, Shepard, Nahmias, Sripada, & Ross, 2014; Rakos, Laurene, Skala, & Slane, 2008).

As a result, it has been found that people generally believe the existence of free will and that attribution of moral responsibility and self-control tend to be facilitated among people who believe in free will strongly (Baumeister & Monroe, 2014; Watanabe, Ota, Karasawa, 2015). In other words, people who believe that free will exists attribute moral responsibility to people's actions and control their own impulses according to their goals.

Psychologists have conducted not only such surveys but also experiments involving manipulation of free will beliefs. In such experiments, information on determinism or mechanism is presented to participants to temporarily weaken their free will beliefs and analyze how the participants' decisions and actions alter afterwards. The results indicate that, when the belief in free will is denied, moral responsibility of the perpetrator in a hypothetical scenario is underestimated (Brewer, 2011), and participants become more tolerant during sentencing decisions (Shariff et al., 2014). This suggests that denying free will weakens the attribution of moral responsibility.

Furthermore, it has been revealed that, when the belief in free will is denied, cheating during exams increases (Vohs & Schooler, 2008), helping behavior decreases, and aggressive behavior increases (Baumeister, Masicampo, & DeWall, 2009). Given that the increase in cheating and aggressive behaviors and the decrease in helping behaviors are thought to reflect the inhibition of self-control, the denial of free will can be said to cause the inhibition of self-control. Based on these findings, the belief in free will is suggested to have a function that promotes the attribution of moral responsibility and self-control.

### 1.3 People's concept of free will

As mentioned above, philosophers have debated the definition of free will over centuries. On the other hand, psychologists have utilized those words as free will in the questionnaire scales, where the definition of free will is set up by psychologists themselves in advance and thus differs depending on their subjective assumptions. Therefore, it is not certain whether the concept that the psychologists presume truly captures people's concept of free will. Even if it captures the people's concept to a certain extent, it is not certain whether it covers the major subordinate

concepts.

These issues will also have some impact on researches that examine the functions of the belief in free will. That is, it is unclear whether an apparent effect of free will beliefs observed in psychological studies actually tracks people's genuine free will beliefs. The objective of developing a free will scale and observing the relevant attitudes and behavior is to examine how people perceive free will and how people's belief in free will functions. If so, asking people directly what kind of concept free will is, rather than having researchers presume the meaning of free will, will become indispensable for advancing future researches on free will.

Monroe and Malle (2010; 2014) pointed out these problems and directly examined people's concept of free will by asking participants, "What does it mean to have free will?" with a free description method. By coding the responses, they extracted the main factors included in participants' concept of free will.

First, in Monroe and Malle (2010) with 201 university students as participants, most responses mentioned three factors: (a) decision or choice (the percentage of respondents mentioning this: 65 %), (b) following one's desires (33 %), and (c) overcoming (internal or external) constraints (29 %). Since Factor (a) corresponds to ability to do otherwise while Factor (b) corresponds to agency, people's concept of free will seems to coincide with the major two concepts discussed in philosophy. In addition, a distinct Factor (c), freedom from constraints, was extracted from the free description results, whose concept can be found as well in some philosophical writings (e.g., Ayer, 1954; Hobbes, 1654).

Furthermore, the study by Monroe and Malle (2014), which had 39 participants of the general public, extracted such factors as (a) absence of constraints (74 %), (b) choice (41 %), (c) desires (38 %), and (d) forethought (26 %). Factor (a) corresponds to freedom from constraints, Factor (b) to ability to do otherwise, and Factor (c) to agency. Although there are some differences in the percentages, it can be concluded that the general public also holds a concept of free will that coincides with that of philosophers and university students.

Some philosophers perceive free will to be a metaphysical concept that includes such factors as indeterminism (e.g., Descartes, 1644; Kane, 1996; Van Inwagen, 1983). Furthermore, there are philosophers who link free will with the non-physical mind (e.g., Swinburne, 2013). However, studies by Monroe and Malle (2010; 2014) observed that there were almost no respondents who mentioned metaphysical factors such as indeterminism. Therefore, free will would not be a concept that includes such metaphysical factors for people.

### 1.4 Present research

A series of studies by Monroe and Malle were conducted in the US, so whether their results could be generalized to other cultures must be examined. The present research asked Japa-

nese participants about the meaning of free will and examine what factors comprise Japanese people's concept of free will. Regarding past studies on functions of free will beliefs, results similar to that of American studies was also found in Japan (e.g., Watanabe, Sakurai, & Karasawa, 2015). Therefore, the meaning of the free will concept, which serves as the foundation of such functions, is considered to show similar results in Japan and the US. As a specific hypothesis, it is predicted that the major factors that comprise Japanese people's concept of free will are ability to do otherwise, agency, and freedom from constraints.

In addition to these factors, the present study analyzes whether the factors of moral responsibility and self-control are included in people's concept of free will. This was to see whether moral responsibility and self-control are simply functions of a belief in free will and are not the people's concept of free will itself. In other words, when people were asked about the meaning of their concept of free will, there would not be many responses mentioning the factors of moral responsibility and self-control.

## 2. Methods

### 2.1 Procedures

Research participation was requested during university classes, and the survey was conducted online. The respondents were 301 Japanese people (177 men, 124 women) with a mean age of 19.98 years old ( $SD = 2.78$ ). Of these participants, 34 who gave responses unrelated to the questions below and 4 who gave responses in which they simply used another term for free will were excluded from analysis. Therefore, the final number of analyzed participants was 263.

### 2.2 Materials

The participants were asked to freely write down the meaning of the concept of free will. A specific question item was "Please explain in a few lines what you think it means to have free will." It was designed so that the participants could not ad-

vance to the next page if their responses in the free description sections were less than 10 characters. For this reason, there were no participants who did not answer.

### 2.3 Coding methods

The first author and another independent researcher coded participants' free description after confirming all responses and identifying four major factors of ability to do otherwise, agency, freedom from constraints, and sourcehood (the ultimate origin of an action is within the agent). In addition, as described earlier, the two factors of moral responsibility and self-control were coded.

If the participants' responses mentioned the fact that there exists a possibility of multiple actions, they were categorized as ability to do otherwise (Table 1). Similarly, if the participants' responses mentioned acting based on some psychological state such as will and desire, they were categorized as agency. Furthermore, responses that mentioned acting which resists external or internal influences were viewed as freedom from constraints. Responses that mentioned acting caused by the individual themselves (and not due to some sort of psychological state) were viewed as sourcehood.

In addition, responses that mentioned acting by considering ethical values and having responsibility to the action itself were viewed as moral responsibility. Responses that mentioned controlling impulsive reactions or action itself were categorized as self-control. The reliability between the coders (Cohen's kappa) was sufficiently high (Table 2).

## 3. Results

As a result of the coding of the free description related to free will, 21 % of the 263 respondents mentioned the ability to do otherwise. Furthermore, 44 % mentioned agency, 30 % freedom from constraints, and 10 % sourcehood. The above results generally coincide with the findings of Monroe and Malle (2010;

Table 1: Examples of content coding regarding free will

Coding category	Participants' responses
Agency	Deciding as one wishes based on one's volition
	Doing as one wishes
Freedom from constraints	Live freely without being restricted by someone
	To not be impounded with some restriction when making decisions
Ability to do otherwise	A state in which freedom of choice is given in decision-making
	One can act from various available options
Sourcehood	The decisive power to do something is within myself
	Decision-making is up to individuals
Moral responsibility	Acting freely based on one's responsibility
	Holding responsibility to one's actions
Self-control	Controlling biological needs using reason
	Controlling one's actions such as dieting by withholding food

Table 2: Results of content coding regarding free will

Coding category	Kappa of agreement	Percentage of participants mentioning the category
Agency (one's own psychological state causes the action)	.89	44 %
Freedom from constraints (acting without internal or external restrictions)	.90	30 %
Ability to do otherwise (multiple actions are possible)	.93	21 %
Sourcehood (the ultimate origin of an action is within the agent)	.86	10 %
Moral responsibility (assigned moral responsibility toward an action)	.96	10 %
Self-control (restraint of one's own impulsive reaction)	.95	3 %

2014), supporting the hypothesis of this research.

On the other hand, the percentage of respondents who mentioned moral responsibility was 10 % with 3 % mentioning self-control. These percentages are relatively low when compared to major factors of the free will, such as ability to do otherwise, agency, and freedom from constraints. Thus, the moral responsibility and self-control are not involved in people's concept of free will itself.

Furthermore, no metaphysical factor (e.g., indeterminism) was seen among responses. Therefore, people's concept of free will would not be such a metaphysical one, as was similarly observed by Monroe and Malle (2010; 2014).

## 4. Discussion

### 4.1 People's concept of free will

This study examined the components of people's concept of free will through free description, as was similarly done in the preceding studies by Monroe and Malle (2010; 2014). As a result, it was revealed that the three major factors comprising people's concept of free will were ability to do otherwise, agency, and freedom from constraints. So the concept of free will held by people collectively means to choose action based on one's psychological state without constraints. This result is consistent with the findings by Monroe & Malle (2010; 2014), leading to the conclusion that the major factors that shape the concept of free will are not different between Japan and the US.

Moreover, the free description by respondents in this study also extracted a factor known as sourcehood. Sourcehood, in philosophy, signifies that the ultimate causes of actions are within the actors (Kane, 1996; Strawson, 1994). Since the percentage of respondents who mentioned this factor is relatively low compared to those who mentioned ability to do otherwise, agency, and freedom from constraints, it seems difficult to say that sourcehood is a major factor comprising people's concept of free will.

Furthermore, a slight difference can be pointed out between people's concept of free will and that presumed by philosophers. Specifically, in studies by Monroe and Malle (2010; 2014) and even in this study, the factor of freedom from constraints was extracted, in addition to ability to do otherwise and agency. While it may be thought that agency is entailed by freedom

from constraints and vice versa, some philosophical works have suggested that it is not always the case.

For example, we can conceive of the situation where someone intimidated you to kill a person, in reality you have desired to do so and thus decided to perform the homicide (Frankfurt, 1969). It seems that this situation manifests a kind of agency in your action but still poses a constraint on it. In accordance with this, the present study conceptualized the two factors as separate, but whether agency and freedom from constraints are truly differentiated among people requires further empirical examination.

### 4.2 Measurement and manipulation of free will beliefs

The findings from this research and past studies suggest that people's concept of free will mainly comprises ability to do otherwise, agency, and freedom from constraints. Such accumulation of empirical findings will pave a way for researchers to advance their discussion by minimizing the conceptual discord regarding free will. Although the term of free will is often used in survey or experimental research without clarifying what it means, it would be necessary to keep in mind that people's concept of free will means to choose one's action based on one's psychological state without constraints.

In addition, future empirical studies on free will beliefs would need to conduct scale construction and manipulation based on this conceptual definition. Particularly, in creating the questionnaire scale related to free will, the subordinate concept should not be assumed based on the researchers' subjective notions. Rather, it would be better to include the three factors of ability to do otherwise, agency, and freedom from constraints as subordinate concepts. Furthermore, even in experimental research examining the function of the concept of free will, the stimuli to manipulate the belief in free will should be created assuming that free will is comprised of these three subordinate concepts.

It is essential for clarifying the relationship between the concept of free will and other variables to define the subordinate concepts of free will, develop a scale and examine their functions in such a manner. For example, clarifying which factor of the subordinate concept is related to moral responsibility and self-control will advance the findings in these topics in which

social psychology has been deeply vested.

#### 4.3 Limitations

Lastly, we would like to discuss the limitation of this study. In this study, the participants were university students. They are possibly more intellectual than the general population and are able to answer to abstract questions. Although Monroe and Malle (2010; 2014) found similar results between the general public and university students in the U.S., it would be worthwhile to see whether Japanese people in general and Japanese university students hold a similar concept of free will.

In addition, to examine the components of people's concept of free will, this study hypothesized that free description methods would be the most appropriate. However, there may be factors that cannot be captured by free description. For example, while participants do not easily imagine a soul when asked, "What does it mean to have free will?," they may still agree with the statement that a soul is necessary for free will if it is presented. Actually in a few existing studies, ambiguous results which can be interpreted either way have been observed with such metaphysical question items (Monroe & Malle, 2014; Nadelhoffer et al., 2014). Therefore, data using such question items needs to be developed in future studies so that the free description and the questionnaire-based methodology could complement each other.

Furthermore, this research assumes that the concept of free will uncovered by free description is valid as a reflection of people's belief rather than the researchers' subjective concept. However, the free description method will not completely eliminate researchers' subjective notions since it seems unavoidable that the concept of free will presumed by researchers becomes mixed in implicitly in coding criteria. Therefore, it will be necessary in the future that results by several researchers be integrated using a meta-perspective. On that basis, discussions accumulated in philosophy and empirical data handled in psychology should be linked with each other, which will generate more valid findings.

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