Data Article

Dataset on motivations and perceptions regarding teaching as a career among teacher education students

Akihiro Saito

Institute of Arts and Sciences, Tokyo University of Science, Japan

A R T I C L E   I N F O

A B S T R A C T

The Factors Influencing Teaching Choice (FIT-Choice) scale was adapted with permission from the original creators [4]. The adapted Japanese version of the FIT-Choice scale was validated using a sample of 202 teacher education students in Japan. This scale measures 12 motivational and six perceptual constructs, as theorised in the FIT-Choice framework, using a 7-point Likert scale. This dataset enhances our understanding of the motivations and perceptions related to pursuing a teaching career among teacher education students in Japan. The entire raw dataset was included in a CSV file. Readers are referred to the original creators' publications [2] according to an agreement restricting the disclosure of all scale items in subsequent publications by the author.

E-mail address: aki.saito@rs.tus.ac.jp

Specifications Table

Subject	Education; Developmental and Educational Psychology
Specific subject area	Career development among teacher education students; their vocational motivation and their perceptions of teaching as a profession
Data format	Raw data in .csv (with codes and numbers)
Type of data	.csv file (dataset with codes and numbers)
Data collection	Due to a confidentiality agreement with the original creators of the scale, which restricts the publication of scale items, the author refers to Watt and Richardson [1] for the complete list of items and codes of the original FIT-Choice scale. Similarly, for items and wording adapted for the survey reported in this article, please refer to the author's related research publication [2].
	The modified FIT-Choice scale was used for data collection. The survey was conducted online and distributed through email invitations, using voluntary sampling within the teacher education programme at one university. A total of 202 education students submitted their responses. Sampling strata for the data collection were determined based on the research hypotheses and corresponding research questions, as discussed in the research related to this article [2] — participants' current academic year, when they first considered teaching as a future career option, and their preferred job at the time of the survey.
Data source location	The respondents were enrolled in a teacher education programme at a four-year university in a suburban area of a megalopolis in Japan.
Data accessibility	Repository name: Zenodo
	Data identification number: doi: 10.5281/zenodo.11485979
	Direct URL to data: https://doi.org/10.5281/zenodo.11485979
	Instructions for accessing these data: The data are available at the above URL.
Related research article	[peer-reviewed, published article] A. Saito, "I chose to receive teacher training because …" Motivations for teaching and career aspirations among teacher education students in Japan, Int. J. Educ. R. Open. 6 (2024) 100330. https://doi.org/10.1016/j.ijedro.2024.100330

1. Value of the Data

- These data are invaluable for understanding the motivations and perceptions of teacher education students in Japan. They also provide potential insights into developing recruitment strategies, improving teacher training programmes, and addressing the working conditions of teachers in Japan in the long run.
- Although numerous studies worldwide have replicated the Factors Influencing Teaching Choice (FIT-Choice) model and its variants, no attempt has been made to adapt and validate the model specifically in the Japanese context. This dataset is noteworthy because it is the first to validate a modified Japanese version of the FIT-Choice model for a specific target population [2].
- This dataset is also important as it highlighted the unique motivations and perceptions of Japanese teacher education students regarding teaching compared with those of teacher education students from other populations in previous surveys. Contrary to pre-service teachers and teacher education students in other countries, prospective Japanese teachers cited past learning and teaching experiences as their primary motivations.
- Another critical aspect of the dataset is its ability to analyse how perceptions of teaching vary according to the unique strata of participants stipulated in the research questions that guided the study relating to the current data article [2]: the current academic year, the point at which they first considered teaching as a future career option, and their preferred job at the time of the survey.
- Previous studies have provided interesting insights into pre-service teachers' motivations and perceptions of teaching as a profession, considering various factors such as prospective roles (classroom teacher versus subject teacher), gender, and socioeconomic and cultural influences. The current dataset allows for further comparative analysis of the general tendencies

of stakeholder perceptions regarding teaching as a career in other regions of the world, while simultaneously producing novel findings by examining specific strata within a theoretically appropriate framework.

2. Background

Given the chronic shortage of teachers in Japan, the survey aimed to collect data on stakeholders, particularly the motivations and perceptions of Japanese teacher education students, focusing on the stages of career development. The author hopes that this will provide a basis for targeted interventions to alleviate teacher shortages and improve the long-term quality of education. Drawing on the FIT-Choice framework [1] and relevant literature on career motivation and development, the survey aimed to determine motivations and attitudes towards teaching as a career and improve our understanding of the factors influencing the choice of teaching as a career among future Japanese teachers. The FIT-Model measures 18 constructs, including 12 motivational and six perceptual factors (Fig. 1). Each construct and the elements targeted by its respective items are listed in Table 1.

Based on previous studies and the current trend that many education students pursue non-teaching jobs, two hypotheses were formulated in the research related to this article [2]: (1) individuals who express an early interest in teaching typically show stronger career motivation, and (2) individuals who continue to pursue their childhood aspirations of teaching demonstrate greater motivation and more favourable perceptions of teaching as a career, while those who opt for non-teaching careers exhibit lower motivation and less positive perceptions. These
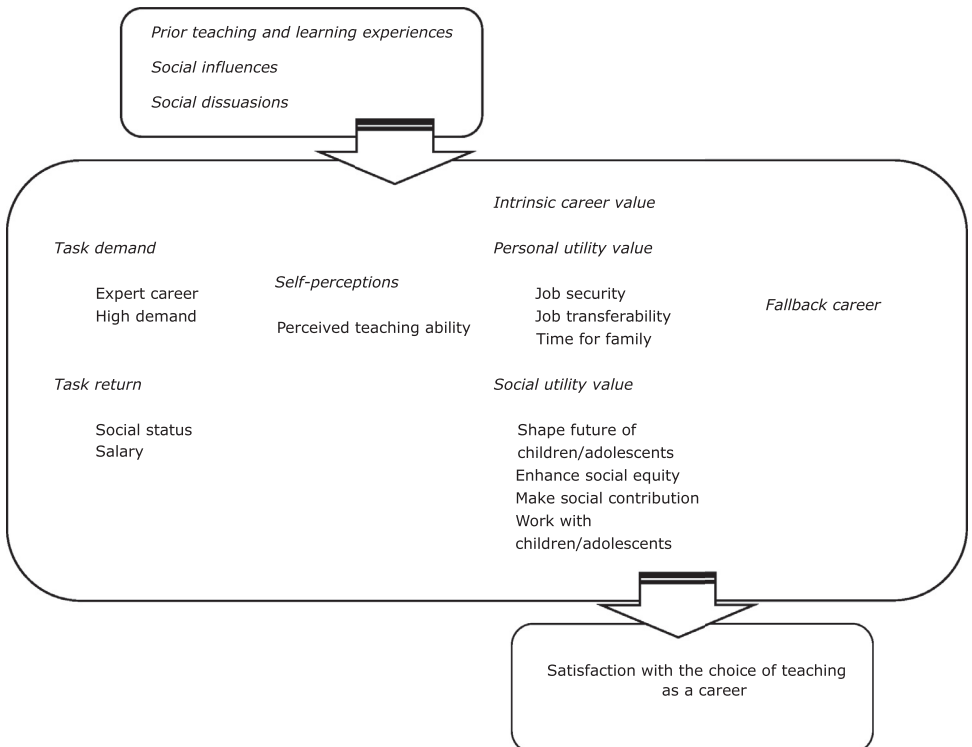

Fig. 1. The FIT-Choice model [1].

Table 1

The FIT-Choice 18 constructs and the elements targeted by survey items.

Type of factor	Description
Motivational factors	
Ability	Participants perceptions of their teaching abilities
Intrinsic career value	Individuals' interest in and desire for a teaching career
Time for family	Motive in teaching for more family time and commitments
Job security	Motive in teaching for a secure job, reliable income, and steady career path
Job transferability	Value in teaching for its international opportunities and flexibility in job location
Prior teaching and learning experiences	Positive influences of prior teaching and learning experiences
Social influences	Influences of significant others such as family members, friends, and colleagues
Make social contribution	Desire to provide a service to society and make a worthwhile contribution
Enhance social equity	Desire to benefit the socially disadvantaged and raise the ambitions of underprivileged youth
Shape future of children/adolescents	Choice of teaching for the opportunity to shape child/adolescent values and influence the next generation
Work with children/adolescents	Desire to engage in a career that involves working with and helping young people
Fallback career	Choice of teaching when other career options do not materialise or remain undecided
Perception factors	
Expertise	Perception of teaching as a career that requires substantial expertise
Difficulty	Perception of teaching as a demanding profession that requires significant effort and dedication
Social status	Perception of teachers as having high social status
Salary	Perception of teachers as having a good salary
Social dissuasion	Extent to which others had dissuaded individuals from a teaching career
Satisfaction with the choice of teaching career	Participants' satisfaction with their choice of a teaching career midway through their teacher education

Note: Adapted from Watt and Richardson [3]

hypotheses were translated into the study's research questions, which then guided the determination of the sampling strata, as discussed subsequently. The data were used to validate an adapted version of the scale in the context of Japanese higher education institutions, thus addressing the lack of a versatile scale for measuring teacher motivation in Japan. The data provide insight into this situation and offer potential innovative solutions. Additionally, they add value to this article by allowing for cross-contextual comparisons that enrich our understanding of different situations worldwide.

3. Data Description

This dataset is available from Zenodo [4]. The columns represent codes assigned to individual items. The rows display responses from the sample, indicated by numbers ranging from 1 to 7 on a 7-point Likert scale, where larger numbers signify stronger motivations and perceptions. Instead of providing a codebook for all survey items, the author referred to Watt and Richardson [1] for the codes and corresponding items of the FIT-Choice scale. This approach was conducted in agreement with the original creators, which restricts the disclosure of all scale items in subsequent publications. For example, the code "B1" relates to the item "I am interested in teaching," which is categorised under the motivational construct "Intrinsic Career Value" in Watt and Richardson [1]. Table 2 details the respondent distribution by stratum, including the specific counts and percentages.

Data were obtained using an adapted version of Watt and Richardson's FIT-Choice scale [1]. This procedure is outlined in the following section. The survey was structured to explore 12 motivational and six perception factors that affect the decision to pursue a teaching career. The

Table 2
Participant distribution by stratum ($N = 202$).

Strata		n	%
Year			
	1st year	70	34.7
	2nd year	40	19.8
	3rd year	48	23.8
	4th year	44	21.8
Timing			
	Primary	37	18.3
	Middle	77	38.1
	High	88	43.6
Preferred job			
	Teaching aspirants	155	76.7
	Non-teaching aspirants	27	13.4
	Pending career decision	20	9.9

Note. In Japanese universities, it is customary for students to start, advance, and complete academic programs in groups. The average age of students entering university for the first time is approximately 18 years old [5]. Students move synchronously throughout their studies and follow a coordinated academic path.

motivational elements are categorised into higher-order factors such as personal utility values, which encompass the sub-factors of 'Job security,' 'Time for family,' and 'Job transferability,' and altruistic social utility values, which include 'Shape future of children,' 'Enhance social equity,' 'Make social contribution,' and 'Work with children.' Additional sub-factors considered were 'Perceived teaching ability,' 'Intrinsic career value,' 'Fallback career,' 'Social influences,' and 'Prior teaching and learning experiences.' The six perception factors are divided into two main categories: task demand, which includes 'Expertise' and 'Difficulty,' and task return, which covers 'Social status' and 'Salary.' The remaining sub-factors are 'Social dissuasion' and 'Satisfaction with choice.'

4. Experimental Design, Materials and Methods

Permission to use and adapt the Watt and Richardson FIT-Choice scale [1] was obtained through email correspondence with the creators. The FIT-Choice scale underwent forward translation and back translation, and any variances were addressed by adjusting the item wording to suit contextual nuances within the Japanese initial teacher training setting. The changes were as follows: Item B8, "Teaching may give me the chance to work abroad," was changed to "Teaching may give me the chance to work in another part of the country," because most students obtain a teacher license valid only in Japanese schools. Another alteration was made to the motivational items on the scale, starting with the phrase "I chose to become a teacher or to study education because..." instead of the original "I chose to become a teacher because..." The remaining items' original wording was retained. Additionally, three multiple-choice items pertaining to the respondents' private information were included in the original 58-item scale to reflect the above mentioned research questions. These items are: participants' current year ('year'): 1st, 2nd, 3rd, or 4th; time at which the respondents thought of teaching as a future career path ('timing'): primary school or earlier, middle school, or high school or later; and their preferred job at the time of the survey ('preferred job'): 'teaching job,' 'non-teaching job,' or 'not yet decided.'

Voluntary sampling was used to recruit participants for this study. An invitation email containing a link to the survey was sent to 977 education students enrolled in a teacher-training program at a university located in a suburban area of Japan. A reminder email was sent to those who did not respond within four weeks of the initial contact. Participants completed the on-

line survey at their convenience, taking approximately 10 to 20 minutes to finish. In total, 202 students completed the survey. The online survey was configured to prevent respondents from skipping items during submission.

Limitations

The potential limitations of this dataset are as follows: The data were obtained through voluntary sampling, primarily owing to resource constraints. In addition, the data sources were limited to a single location. Therefore, the sample may not have fully captured the diversity of the broader population. Thus, caution should be taken when generalising the findings.

Ethics Statement

Informed consent was obtained from respondents through the email invitation letter. This invitation contained important details, including an overview of the survey, the estimated time required to complete it, and the option to withdraw at any time without notice or consequences. It also assured that the data would remain anonymous. Although the data may be used in future publications, it will be untraceable to individual respondents, ensuring confidentiality. The dataset does not include any personally identifiable information, such as the names of the universities and courses involved. In addition to these conventions regarding informed consent and anonymity, the following points were considered in assessing the necessity of ethics clearance: vulnerability, survey content, and ethical guidelines. The participants were education students, generally not classified as vulnerable. The invitation letter detailed the voluntary nature of participation, the option to withdraw at any time, and assurances of anonymity and confidentiality. The survey focused on educational experiences and perceptions, containing no sensitive questions likely to cause psychological distress. Since the institution the author was affiliated with at the time of the survey had not adopted a formal ethical protocol, he referenced external ethical guidelines [6]. According to the referenced guidelines, this study fits the criteria for exemption from ethical review as it poses minimal risk. Furthermore, previous studies with similar methodologies seem to have operated under these guidelines without requiring formal ethical review. For these reasons, the author concluded that ethical approval is not required for this research as it does not involve vulnerable participants or pose a risk of causing undue psychological distress.

Declaration of generative AI and AI-assisted technologies in the writing process

During the preparation of this work the author used ChatGPT3.5 to improve readability. After using this tool/service, the author reviewed and edited the content as needed and takes full responsibility for the content of the publication.

Data Availability

Dataset on motivations and perceptions regarding teaching as a career among teacher education students in Japan (Original data) (Zenodo)

CRediT Author Statement

Akihiro Saito: Conceptualization, Methodology, Validation, Formal analysis, Investigation, Resources, Data curation, Writing – original draft, Writing – review & editing, Visualization, Project administration.

Acknowledgements

Declaration of competing interest

The authors declare no competing financial interests or personal relationships that could have influenced the work reported in this study.

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