

## **Comparative Perspectives on Motivations and Values Among Novice Teachers**

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### **Abstract**

The current study aims at analyzing and comparing novice teachers' motivations, values, and beliefs ( $N=810$ ) from two different countries, namely the United States and Switzerland. Both groups, the US participants ( $n=327$ ) and the Swiss participants ( $n=483$ ) were enrolled in a teacher training program in their respective countries. Study results identified the main teaching motivations across all subsamples as related to participants' personal values, social values, their teaching views, and instructional beliefs. Study results show that while motivational factors were similar at many levels between the two subsamples, their teaching views and their instructional beliefs were different and varied across participants from the two countries. Findings can help educators understand the interplay between teaching motivations and beliefs as well as cultural nuances related to these concepts.

*Keywords:* beliefs, motivations, teachers, values

International research in education has examined the teaching motivations and beliefs among teachers to understand various aspects related to individual choices for a teaching career (Berger & Girardet, 2020; Thomson, Turner, & Nietfeld, 2012; Thomson & Palermo, 2014; Watt & Richardson, 2008, 2011). Many countries experience acute teacher attrition and simultaneously the need for teaching quality. Examining the key motivations and beliefs of individuals pursuing a teaching career could help educators, administrators and other stakeholders understand factors related to teacher attrition (i.e., entry teaching reasons versus exit reasons). Analysis of novice teachers' professional goal development, their initial teaching motivations, and their early beliefs about what teaching means can shed light into understanding *possible mismatches* between their initial views of teaching and the existing realities of teaching. Such mismatches can influence teachers' rethinking of their professional goals, fueling dissatisfaction with the teaching profession and possibly contribute to teacher shortages.

Research suggests that too often teachers grow dissatisfied with their profession and even less efficacious in their teaching because the reality of teaching was different than how they initially perceived it (i.e., Parkes & Jones, 2012; Thomson, Turner, & Nietfeld, 2012; Thomson, Huggins, & Williams, 2019; Thomson, Walkowiak, Whitehead, & Huggins, 2020). National and international educational reports show that thousands of teachers leave the profession, most of them with fewer than five years of experience (National Commission on Teaching and America's Future, 2007; OECD, 2009; Richardson & Watt, 2005, 2006). There is a growing consensus among researchers and educators that many teachers leave the profession *because teaching is not what they believed it would be*. As they learn what the work truly is, they become dissatisfied with the profession, citing working conditions, the lack of administrative support, little peer collegiality and a lack of influence over school policy as reasons for their departure (Ingresoll & Smith, 2004; Müller, Alliaata, & Benninghoff, 2009). Indeed, these factors point to prospective teachers having goals and belief systems about teaching that do not often match the realities of classrooms and schools (Thomson & McIntyre, 2013; Thomson & Palermo, 2018). It is essential therefore to understand *prospective teachers' initial professional goals* for teaching, including their teaching *motivations*, their *views about teaching* and *instructional beliefs*.

### **Teaching Motivations**

A bulk of educational research has been developed in recent years because of increasing rates of attrition among teachers worldwide (Berger & D'Ascoti, 2012; Ingresoll & Smith, 2004; Thomson & Palermo, 2014, 2018; Watt & Richardson, 2008, 2011). Several research studies focus on exploring the initial motivations and how these influence individuals' choices about teaching, while other studies focus on motivation and persistence in the teaching profession. Researchers commonly classify teaching motivators into intrinsic and extrinsic reasons, described as key reasons and values to teach, along with individuals' perceptions of and commitment to the teaching career (i.e., Konig & Rothland, 2012; Pop & Turner, 2009; Thomson, Turner, & Nietfeld, 2012; Richardson & Watt, 2005). Previous research (Kyriacou & Coulthard, 2000) has argued that individuals enter the teaching profession for one of three primary reasons, including altruistic reasons—such as the conception of teaching as a socially valuable profession—in addition to intrinsic and extrinsic reasons. More recent research, emphasizing an expectancy-value perspective, have found that the types of values and expectations teachers exhibit are crucial for their teaching choices, effort, and goal persistence (i.e., Fokkens-Bruinsma & Canrinus, 2012; Thomson & Palermo, 2018; Watt & Richardson, 2012; Watt et al., 2012).

International studies conducted with prospective teachers from various countries, including the United States, Australia, Switzerland, Germany, Turkey, and Estonia have reported similar conclusions, highlighting the importance of values across cultural contexts (Berger & Girardet, 2020; Kilinc, Watt, & Richardson, 2012; Taimalu, Luik, Voltri, & Kalk, 2011; Watt & Richardson, 2008, 2011; Watt, et al., 2012). Studies exploring teaching motivation from an expectancy-value theory perspective have found that teachers' values and expectations are crucial for their individual teaching choices, persistence in pursuing the teaching goal, and the effort invested in accomplishing their professional goals (Fokkens-Bruinsma & Canrinus, 2012; Parkes & Jones, 2012; Watt & Richardson, 2008).

### **Teaching Beliefs**

Research findings show that teachers' motivations for teaching along with their beliefs about teaching are at the core of teachers' professional identities and classroom decisions (Guarino, Santibanez, & Daley, 2006; Lauermann, & Karabenick, 2011; Rinke, 2008). Studies exploring the relationship between teacher expectancies and ability beliefs find these constructs to be strongly connected with motives for entering and persisting in the teaching profession, as well as engaging in meaningful professional development initiatives. In their study, Ware and Kitsantas (2010) found that teachers' beliefs, including teachers' efficacy for classroom management, significantly predicted their commitment to teaching. A growing body of literature examining teacher efficacy, or teachers' beliefs about their abilities to help students learn (Pajares, 1996; Thomson, Huggins, & Williams, 2020; Tschannen-Moran & Woolfolk Hoy, 2001), has shown that teachers constantly make judgments about the demands of teaching tasks as well as their abilities to meet these demands.

Additional research, examining teachers' expectation for compensation and the perceived value placed on salary showed that teachers expect an adequate pay for their level of engagement. While most teachers reported that teaching motivation is contingent on adequate compensation for work, other factors, such as satisfaction in working with students and making a difference in students' life, eclipsed their dissatisfaction with payment (Watt & Richardson, 2008; Watt & Richardson, 2012).

### **Study purpose**

The purpose of the current study was to identify and compare teaching motivations across different subsamples, namely, novice teachers from the United States and Switzerland. We explored the most influential motivations, teaching career views, and instructional beliefs between the two subsamples, and how these constructs are comparable across subsamples. Our study is a response to the research scarcity in the teaching education field, particularly understanding novice teachers' motivations and beliefs from various countries and exploring cross-cultural comparisons. The research questions addressed in the current study are the following:

1. What key teaching motivators, views about teaching, and instructional beliefs can be identified among all participants ( $N=810$ )?
2. How do participants from the two samples (i.e., the US and Swiss) differ with respect to their teaching motivations, views about teaching, and their instructional beliefs?

## Methods

### Participants and Procedures

Data were collected using surveys from prospective teachers enrolled in a teacher education program in their respective countries, namely the United States and Switzerland ( $N=810$ ). Participants from the US ( $n=327$ ) were enrolled in a teacher training program in a college of education, at a major university, while participants from Switzerland ( $n=483$ ) were enrolled in a VET education program (Vocational Education and Training).

Participants from the United States indicated in their survey responses that the majority were females ( $n=241$ ; 73.7%); only 86 (26.3%) were male participants. In terms of age, the mean age for the US participants was 25 years and seven months, and their primary language was English. The US participants were enrolled in different areas/programs of a traditional teacher education program. Each program has a focus on a particular subject area, such as elementary education, mathematics education, science education. In the current study, most US participants were enrolled in the Elementary Education undergraduate program ( $n=120$ ; 36.7%) and in the Science Technology Engineering and Mathematics (STEM) Education undergraduate program ( $n=44$ ; 13.5%). Additionally, 69 (21.1%) participants were enrolled in the graduate Master of Arts Teaching program (MAT). Participants enrolled in an undergraduate teaching preparation program follow a 4-year coursework, which is the typical route in the US for becoming a teacher. Participants from the MAT program in the US, follow a 2-year master's program focusing on teacher training. Also, most US study participants ( $n=295$ ; 90.2%) indicated in the survey that they intend to teach immediately after graduating from their teacher education program.

Participants from Switzerland indicated in their survey responses that the majority were males ( $n=314$ ; 65.01%); only 169 (34.99%) were female participants. The mean age for the Swiss participants was 40 years and eight months. A unique feature of the Swiss sample was the fact that participants were from the two main linguistic regions of Switzerland: German speaking ( $n = 327$ , 67.7% of sample), and French speaking ( $n = 156$ , 32.3% of sample). Additionally, participants in the Swiss sample had previous teaching experience to a certain degree, unlike the US participants. All Swiss study participants were enrolled in an in-service teacher education program at the Swiss Federal Institute for Vocational Education and Training (VET), typically a 3-year program. They were previously trained in a relevant professional field as apprentices and had practiced for several years before beginning a career as VET teachers. As a result, the Swiss participants were already active as teachers, generally for a few years. The average teaching experience before commencement of their teacher education training was five years and three months. Most Swiss participants worked in an enterprise employing apprentices before switching into teaching, although one-third had no experience in employing and managing apprentices.

### Measures

For the current study, we used two measures to examine prospective teachers' *motivations for teaching*, their *views about teaching*, and their *instructional beliefs*. To examine teaching motivations and participants' views about teaching we used an adapted version of the *FIT-choice scale* (Watt, & Richardson, 2007). This is a 62-item inventory on a 7-point Likert scale asking participants to rate their most influential motivations for teaching and their agreement with statements about the teaching profession. Psychometric properties of the *FIT-choice scale* are reported in the original study of Watt and Richardson (2007). In the adapted version of the

*FIT-choice scale* used in the current study, the reported Cronbach's alpha values for the instrument was .91 (for the US sample) and .84 (Swiss sample).

To examine prospective teachers' instructional beliefs, we used the *Teaching and Learning International Survey* (TALIS, OECD, 2009). This is an 8-item inventory on a 7-point Likert scale asking participants to rate their agreement with survey pedagogical statements. The reported Cronbach's alpha for the instrument was .95 (for the US sample) and .81 (Swiss sample). Appendix A presents the study constructs and sample survey items.

## Results

### Factor Analysis and Invariance Testing

To answer our first research question "What key teaching motivators, views about teaching, and instructional beliefs can be identified among all participants?", a series of factor analysis were performed. Multiple-group confirmatory factor analyses (M-G CFA) for the study sample ( $N=810$ ) were performed for each instrument.

#### *Teaching Motivation*

Regarding participants' *teaching motives*, in the current study, we first tested the 32 teaching motivation items (from the *FIT-choice scale*). A 10-factor solution demonstrated satisfactory data fit<sup>1</sup>:  $\chi^2_{(876)} = 2068.04$ ,  $p < .001$ ,  $\chi^2/df = 2.36$  ( $\chi^2_{US} = 1117.61$ ,  $\chi^2_{Swiss} = 950.43$ ), CFI = 0.90, RMSEA = 0.06. Additionally, two second order factors, namely *personal utility value* (i.e., job security and time for family) and *social utility value* (i.e., social contribution, enhancing social equity) were modeled. Table 1 displays all motivation factors.

Across all data ( $N=810$ ), the most influential motives on individuals' choices to become teachers were *aptitude*, *intrinsic value*, *opportunity*, *personal utility*, and *social utility*. These 5 factors had the highest ranking among participants from both countries.

#### *Perceptions of the Teaching Career*

A second test was performed on the 6 factors representing participants' *perceptions of teaching* (19 items, from the *FIT-choice scale*). The six types of *perceptions* identified in the current study were: 1) *expertise*, 2) *high demand*, 3) *social status*, 4) *salary*, 5) *social dissuasion*, and 6) *satisfaction with choice*. Table 1 displays the identified factors for participants' perceptions of teaching. The 6-factor solution was found to fit the data adequately<sup>2</sup>:  $\chi^2_{(295)} = 609.96$ ,  $p < .001$ ,  $\chi^2/df = 2.07$  ( $\chi^2_{US} = 288.16$ ,  $\chi^2_{Swiss} = 321.80$ ), CFI = 0.93, RMSEA = 0.05.

#### *Instructional beliefs*

Finally, a third test was performed on the 2 factors representing participants' *instructional beliefs* (8 items, from TALIS). Two types of *instructional beliefs* were identified, namely: 1) *constructivism* and 2) *direct transmission*. The 2-factor solution was found to fit the data adequately<sup>3</sup>:  $\chi^2_{(22)} = 50.03$ ,  $p < .001$ ,  $\chi^2/df = 2.27$  ( $\chi^2_{US} = 13.66$ ,  $\chi^2_{Swiss} = 36.37$ ), CFI = 0.95, RMSEA = 0.06. Table 1 displays the factors for participants' instructional beliefs.

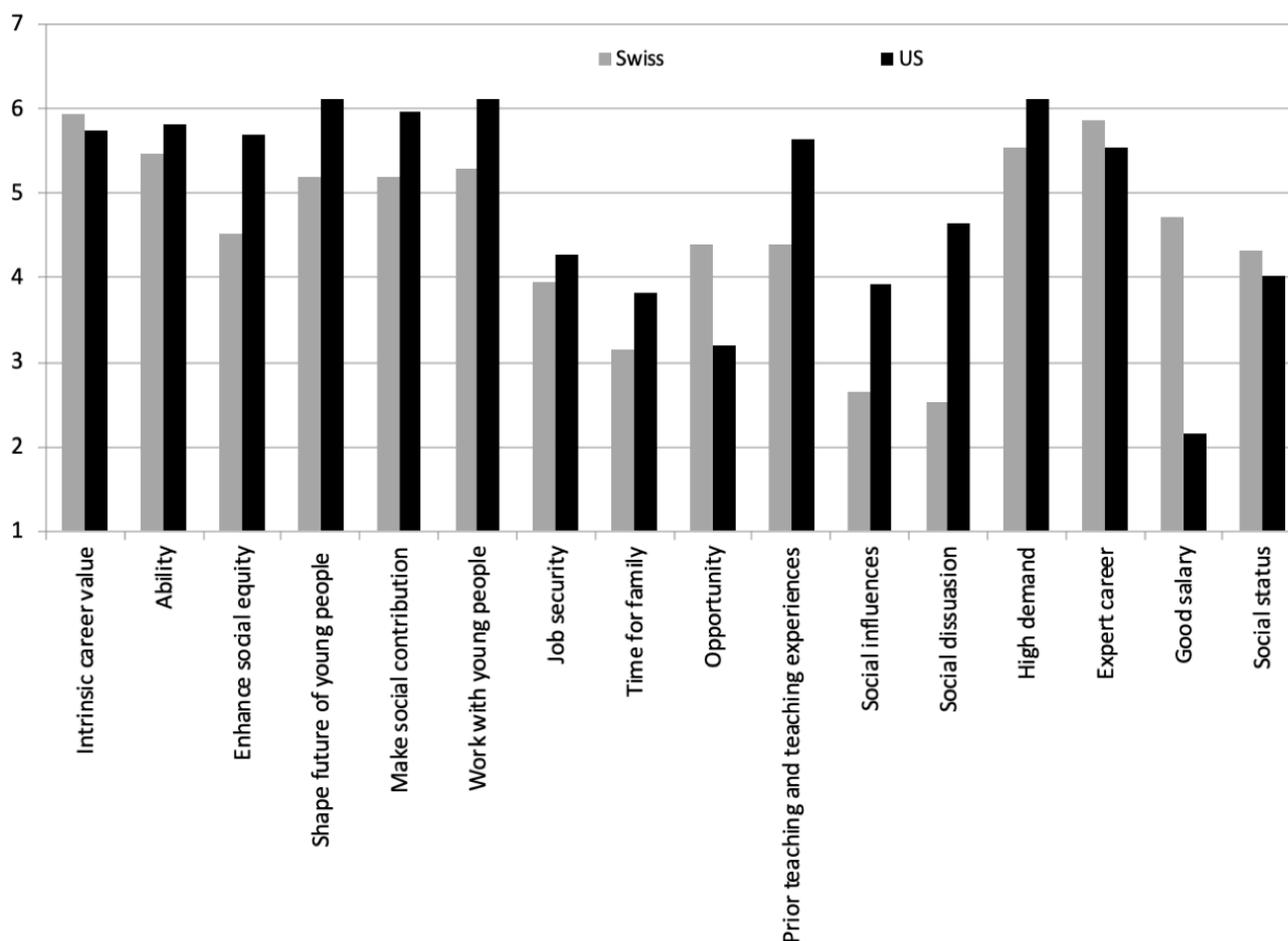
**Table 1**  
Teaching Motivations and Perceptions of Teaching Results (N=810)

| Scale                                   | #<br>Items | Swiss VET teachers<br>(n = 483) |      | US novice teachers<br>(n = 327) |      |
|---|------------|---------------------------------|------|---------------------------------|------|
|   |            | Mean                            | SD   | Mean                            | SD   |
| <i>Motivation</i>                       |            |                                 |      |                                 |      |
| Intrinsic career value                  | 4          | 5.94                            | 0.89 | 5.73                            | 1.16 |
| Ability                                 | 3          | 5.46                            | 0.97 | 5.81                            | 1.05 |
| Enhance social equity                   | 2          | 4.52                            | 1.48 | 5.70                            | 1.32 |
| Shape future of young people            | 2          | 5.19                            | 1.07 | 6.12                            | 1.11 |
| Make social contribution                | 3          | 5.28                            | 1.24 | 5.96                            | 1.16 |
| Work with young people                  | 4          | 3.94                            | 1.50 | 6.12                            | 1.09 |
| Job security                            | 3          | 3.16                            | 1.47 | 4.28                            | 1.40 |
| Time for family                         | 5          | 4.39                            | 1.20 | 3.82                            | 1.43 |
| Opportunity                             | 3          | 4.39                            | 1.56 | 3.21                            | 1.51 |
| Prior teaching and teaching experiences | 3          | 2.65                            | 1.60 | 5.64                            | 1.28 |
| Social influences                       | 3          | 2.52                            | 1.42 | 3.93                            | 1.66 |
| Social dissuasion                       | 4          |                                 |      | 4.64                            | 1.62 |
| <i>Perceptions of teaching</i>          |            |                                 |      |                                 |      |
| High demand                             | 3          | 5.53                            | 0.96 | 6.12                            | 0.94 |
| Expert career                           | 2          | 5.86                            | 0.92 | 5.54                            | 1.15 |
| Good salary                             | 2          | 4.72                            | 1.38 | 2.15                            | 1.23 |
| Social status & Teacher morale          | 6          | 4.31                            | 1.03 | 4.03                            | 1.27 |
| <i>Instructional beliefs</i>            |            |                                 |      |                                 |      |
| Constructivism                          | 4          | 5.72                            | 0.81 | 5.49                            | 0.84 |
| Direct instruction                      | 4          | 4.58                            | 1.10 | 3.48                            | 0.97 |

### Comparative Analysis Across Samples

Comparison of factor means were performed to answer our second research question “How do participants from the two samples (i.e., the US and Swiss) differ with respect to their teaching motivations, views about teaching, and their instructional beliefs?”. Results from the comparative analysis are described below; additionally Figure 1 and Table 1 present a summary of the comparative results.

**Figure 1**  
*US and Swiss Samples Comparisons (N=810)*



### ***Motivation for the Teaching Career***

Results from the factor analysis (conducted on the *FIT-choice* responses) identified five main motivators across all participants ( $N=810$ ), as influential reasons for individuals' choices to become teachers. These factors were, namely: *aptitude* (i.e., teaching abilities), *intrinsic values* (i.e., enjoyment for teaching), *opportunity* (i.e., professional opportunities through teaching), *personal utility* (i.e., perceived practical utility), and *social utility* (i.e., helping society or other individuals). In both the US and Swiss samples, *intrinsic value*, *ability*, and *social utility value* were rated as more important than *personal utility value* and *opportunity*.

There were nonetheless mean differences across the subsamples. Comparison of factor means revealed that the US preservice teachers rated the importance of all the five key motivation factors as significantly higher (all  $p < .001$ ) than Swiss participants. However, the US participants rated lower *opportunity* compared to the Swiss sample (factor mean difference = 1.29).

### ***Beliefs about the Teaching Career***

Inspections of means and standard deviations from participants' ( $N=810$ ) responses indicated similarities and differences across the two samples with respect to their beliefs about teaching. Concerning participants' perceptions of the teaching career, the US prospective teachers reported higher scores on *task demand* and *social dissuasion* (standardized factor mean

differences of 0.78 and 1.37 respectively) compared to Swiss participants. However, the US sample rated lower in their survey *good salary* compared to the Swiss sample (standardized factor mean difference = 1.88; all  $p < .001$ ). Other factors, like *expertise*, *social status*, and *satisfaction with choice* did not differ significantly across samples.

### ***Instructional beliefs***

Participants' responses about their instructional beliefs varied between the two samples. With respect to participants' survey responses about *direct transmission beliefs* the Swiss sample scored higher than in the US sample (standardized factor mean difference = 1.36;  $p < .001$ ). Regarding participants' survey responses about their *constructivist beliefs*, results showed no significant differences between the two subsamples.

## **Discussion**

### **Overview of Results**

The interplay of different types of teaching motivations and instructional beliefs was unique for each subsample, however similarities in motivational factors (US and Swiss samples) were evident. Findings show that the most influential motivational factors for participants' teaching choices were similar for the two samples (i.e., *social values*, *intrinsic values*), but others were dissimilar and/or specific only for one subsample (i.e., *perceived opportunity*). Overall, findings from the comparison analysis revealed similarities with respect to participants' rating of *teaching motivations*; participants from both the US and Switzerland indicated high ratings on *intrinsic motivations*, *ability to teach*, and *work with young people*. However, differences between the two samples regarding their teaching motivations were observed mainly related to antecedent socializations (i.e., *prior teaching experience*, *social influences*, and *social dissuasion*). Additionally, similarities were found regarding participants' *perceptions about teaching*, particularly their views about the teaching social status (i.e., *expert career* and *teaching morale*), but differences were observed as related to participants' perceptions of salary and effort (i.e., *good salary* and *high demand career*). Similarities between the two samples were observed regarding participants' responses on *constructivist beliefs*, but differences were recorded regarding their *direct transmission beliefs*.

These results are in line with most international research findings in the field showing that intrinsic, altruistic, and social motivations are the most common for individuals' choice to enter teaching. The initial career satisfaction, in addition to self-perceived teaching ability has been linked to altruistic motivations and intrinsic value in studies from various countries (Pop & Turner, 2009; Thomson, Turner, & Nietfeld, 2012; Saban, 2003; Watt & Richardson, 2007, 2008, 2011).

Furthermore, study findings suggest that at some level all participants had similar motivations for teaching, but different antecedent socializations and perceptions of the teaching career. These differences can be explained by the different cultural contexts of each country, by the characteristics of each teacher training program, and by the participants' demographics. Considering the teacher education programs and the demographic characteristics for both samples, there are specific contextual differences. In terms of gender, most US participants were females, while most of the Swiss participants were male. As for age, for the Swiss participants the average age was 40 years old, while for the US participants the average age was 25 years old. Given the age gap between the two samples, it can be inferred that their life and professional goals could be somehow different. Additionally, the US participants followed a traditional teacher training program, teaching being their first choice of a career. The Swiss

participants, however, already had experience in a different professional field prior to entering the teacher education program, thus they can be considered career switchers.

Findings from international studies have shown that one's motivation for teaching and beliefs about teaching can vary across different contexts. These variations are reflecting the sociocultural contexts in different countries that could shape individuals' teaching views. Studies conducted in Australia (i.e., Watt & Richardson, 2007, 2008), Turkey (i.e., Saban, 2003, 2004), UK (i.e., Kyriacou & Coulthard, 2000) and the US (i.e., Thomson, Huggins, & Williams, 2019; Thomson, Turner, & Nietfeld, 2012; Thomson & McIntyre, 2013) show that individuals' teaching motivations are strongly connected with their teaching beliefs and their expectations of the profession.

### **Implications**

The current study findings can add to the existing literature in the field by showing that teaching motivations, professional views and instructional beliefs differ across countries and cultures, thus helping teacher educators better understand and support teachers' professional goals. Teacher education programs may also benefit by tailoring teacher training programs to consider differences in the initial motivations and teaching beliefs of teachers (Thomson & Palermo, 2014). Efforts can be taken to better align coursework and field experiences with prospective teachers' beliefs, expectations, and values, while at the same time providing them with opportunities for these psychological attributes to be challenged by the various sides of teaching.

In the US, reforms introduced two decades ago emphasize the need to place more qualified and motivated teachers in the field to increase students' academic achievements. To do so, teachers need to be better prepared in their teaching education programs, and helped to develop professionally (AEEE, 2005; NCTQ, 2004; NCTA, 2007). In Switzerland, similarly, teacher education programs aim at promoting quality teaching as well and efforts to retain teachers via all-encompassing professional development programs (Berger & Girardet, 2020).

### **Limitations and Future Research**

Some of the study limitations are due to participants' demographics and their academic background. Participants in this study followed a teacher preparation program in a public institution in their respective countries (US and Switzerland). It is possible that their teaching motivations, their teaching views, and their pedagogical beliefs could be different from individuals following a non-traditional teacher training program, or individuals enrolled in teacher training programs from private institutions.

Future research could address these limitations by examining the motivations, teaching views and beliefs of participants with various backgrounds, and following various teacher education routes to licensure (i.e., from private and public institutions, traditional and non-traditional teacher training programs). Future studies could build on our study by using longitudinal mixed methods designs to follow teachers into their first five years of teaching (which are critical to teacher professional development) and analyze more in-depth participants' changes in their teaching motivations and instructional beliefs.

### **Conclusion**

Overall, findings show that across both samples the key motivational factors for choosing a teaching career were similar, with intrinsic motivation and social values being the most

influential, but other notable differences existed. Participants' teaching views and instructional beliefs varied across the two samples to a larger degree compared to motivations. While the current study presents a broad image of motivations, teaching views and instructional beliefs of novice teachers from two countries, it also points to the need to examine more deeply the myriad of factors that can better explain differences in the vocational choices and beliefs system of novice teachers. Motivation may predict the extent to which individuals will learn from their teacher training programs and can help change their instructional beliefs and classroom practices. Teachers' motivations for teaching and their beliefs about teaching are at the core of teachers' professional identities and classroom decisions.

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## Footnotes

1. Configural invariance was first assessed by performing identical CFA models separately for each sample: (US:  $\chi^2_{(419)} = 1201.94$ ,  $p < .001$ ,  $\chi^2/df = 2.87$ , CFI = .87, RMSEA = .08; Swiss  $\chi^2_{(419)} = 1023.68$ ,  $p < .001$ ,  $\chi^2/df = 2.44$ , CFI = .93, RMSEA = .05). Then, a fully constrained multigroup model was tested:  $\chi^2_{(882)} = 2439.01$  [ $\chi^2_{US} = 1341.56$ ,  $\chi^2_{Swiss} = 1097.44$ ],  $p < .001$ ,  $\chi^2/df = 2.77$ , CFI = .87, RMSEA = .07. Comparison of this later model with the final model using the Satorra-Bentler scaled difference test (Satorra & Bentler, 2001) indicates a significant improvement in model fit:  $\chi^2_{(6)} = 370.97$ ,  $p < .001$ .
2. Configural invariance was first assessed by performing identical CFA models separately for each sample: (US:  $\chi^2_{(296)} = 553.55$ ,  $p < .001$ ,  $\chi^2/df = 1.87$ , CFI = .94, RMSEA = .04; Swiss  $\chi^2_{(296)} = 483.95$ ,  $p < .001$ ,  $\chi^2/df = 1.64$ , CFI = .92, RMSEA = .04). Then, a fully constrained multigroup model was tested:  $\chi^2_{(300)} = 941.62$  [ $\chi^2_{US} = 456.88$ ,  $\chi^2_{Swiss} = 484.75$ ],  $p < .001$ ,  $\chi^2/df = 3.14$ , CFI = .86, RMSEA = .07. Comparison of this later model with the final model using the Satorra-Bentler scaled difference test (Satorra & Bentler, 2001) indicated a significant improvement in model fit:  $\chi^2_{(5)} = 331.66$ ,  $p < .001$ .
3. Again, configural invariance was first assessed by performing identical CFA models separately for each sample: (US:  $\chi^2_{(8)} = 29.39$ ,  $p < .001$ ,  $\chi^2/df = 3.67$ , CFI = .94, RMSEA = .07; Swiss  $\chi^2_{(8)} = 8.03$ ,  $p = 1$ , CFI = 1, RMSEA < .01). Then, a fully constrained multigroup model was tested:  $\chi^2_{(24)} = 123.08$  [ $\chi^2_{US} = 72.08$ ,  $\chi^2_{Swiss} = 50.59$ ],  $p < .001$ ,  $\chi^2/df = 5.13$ , CFI = .82, RMSEA = .10. Comparison of this later model with the final model using the Satorra-Bentler scaled difference test (Satorra & Bentler, 2001) indicated a significant improvement in model fit:  $\chi^2_{(14)} = 73.05$ ,  $p < .001$ .

**Appendix A***Survey Constructs and Sample Items*

| Construct                      | Definition   | Sample item  |
|--------------------------------|--|--|
| <i>Motivation</i>              |  |  |
| Intrinsic career value         | Choosing teaching for intrinsic motives like interest                                      | I like teaching  |
| Teaching Ability               | The extent to which one believes he/she has abilities to teach                             | I have the qualities of a good teacher                               |
| Enhance social equity          | Choosing teaching to help the socially disadvantaged and raise their ambitions             | Teaching will allow me to help underprivileged youth                 |
| Shape future of young people   | Choosing teaching to influence young people's values                                       | Teaching will allow me to influence the next generation              |
| Make social contribution       | Choosing teaching to offer a service to the society and contribute to it                   | Teaching will allow me to provide a service to society               |
| Work with young people         | Choosing teaching to work with young people and help them grow                             | I want a job that involves working with young people                 |
| Job security                   | Choosing teaching to get a secure job in terms of reliable income and path career          | Teaching will provide a secure job                                   |
| Time for family                | Choosing teaching to get more time for one's family life and commitments (quality of life) | Teaching hours will fit with the responsibilities of having a family |
| Opportunity                    | Choosing teaching by opportunity   | I simply go the chance to teach                                      |
| Teaching experiences           | Perception of past experiences as a learner or in a teaching role                          | I have had inspirational teachers                                    |
| Social influences              | Perception of the extent to which one has been encouraged or persuaded to go into teaching | My colleagues/friends/family thought I should become a teacher       |
| Social dissuasion              | Perception of the extent to which one has been dissuaded to go into teaching               | Did others tell you teaching was not a good career choice?           |
| <i>Perceptions of teaching</i> |  |  |
| High demand                    | Perception of teaching as being demanding emotionally/heavy workload                       | Do you think teachers have a heavy workload?                         |
| Expert career                  | Perception of teaching as requiring high levels of specialized knowledge                   | Do you think teaching requires high levels of expert knowledge?      |
| Good salary                    | Perception of teaching as a well-paid job  | Do you think teaching is well paid?                                  |
| Social status & Teacher morale | Perception of teaching as socially respected and high-status career                        | Do you believe teachers are perceived as professionals?              |
| <i>Instructional beliefs</i>   |  |  |
| Constructivism                 | Learning is an active process of knowledge and competence acquisition                      | My role as a teacher is to facilitate students' own inquiry          |
| Direct instruction             | Teacher's role is to transmit knowledge  | Effective teachers demonstrate the correct way to solve a problem    |