




Article

The Impact of Perceived Self-Efficacy and Satisfaction on Preservice Teachers' Well-Being during the Practicum Experience

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Abstract: Teachers' psychological and social well-being has become a relevant concern for the educational community. Specifically, damage to it affects preservice teachers (PSTs) when confronting educational challenges during their initial teacher education. PSTs' well-being is related to self-perceptions of professional worth, which impacts their emotional states, actions, and beliefs. Perceived self-efficacy is a well-known indicator to measure these self-perceptions, allowing us to explore PSTs' valuation of their competence during experiential opportunities for professional development. The practicum is considered for investigating perceived self-efficacy predictors, since direct professional performance can be observed. This context also allows the exploration of their satisfaction with their competence development and the training environment. This study analyzes PSTs' perceived self-efficacy predictors and job satisfaction during practicum experiences. A mixed methodological design was selected with 258 PSTs participating in the quantitative part and nine PSTs in the qualitative part. Descriptive, correlational, and inferential statistical analyses and two focus group sessions were conducted. The findings show changes in perceived self-efficacy are generated by social interactions and mastery experiences. Changes in perceived self-efficacy, satisfaction with one's competence, and the school environment are related significantly. Our conclusions highlight the role of mentoring during the practicum in caring for PSTs' self-perceptions and improving their satisfaction with the experience. The importance of caring for well-being to avoid stressful situations during the first training stages and prevent burnout in teachers in service is considered. Research implications in the lines proposed are further discussed.

Keywords: preservice teacher; teacher wellbeing; perceived self-efficacy; initial teacher education; practicum; student teaching experiences; mentoring



Citation: García-Lázaro, I.; Colás-Bravo, M.P.; Conde-Jiménez, J. The Impact of Perceived Self-Efficacy and Satisfaction on Preservice Teachers' Well-Being during the Practicum Experience. *Sustainability* **2022**, *14*, 10185. <https://doi.org/10.3390/su141610185>

Academic Editors: Hongbiao Yin, Ronnel Bornasal King and Guoxiu Tian

Received: 25 July 2022

Accepted: 14 August 2022

Published: 16 August 2022

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1. Introduction

Well-being is traditionally considered from psychological and social perspectives. It is focused on how people individually confront difficulties and challenges and contribute to social purposes [1,2]. Well-being is specifically relevant in education since it affects the quality of educators' personal and professional lives. Recently, Hascher and Waber [3] considered teacher well-being a complex matter that involves cognitive, affective, social, and psychological areas. To invest in quality professional careers for future teachers, it is suggested to investigate preservice teachers' (PSTs) well-being [4]. Likewise, to explore PSTs' well-being, it is essential to consider contextual factors due to their influence on schools. These spaces are particularly relevant in the study of well-being as they allow PSTs to question their knowledge, attitudes, values, and competencies [5]. Although well-being involves several dimensions, this study will be framed by psychological or personal and social factors that present strong interconnections in their impact on professional

well-being [6]. Psychological elements, such as perceived self-efficacy or job satisfaction, strongly influence the experience of teaching when it is needed to self-evaluate and fulfill purposes. Likewise, in the social dimension, we will consider interactions with agents, such as cooperating teachers (CTs), university supervisors (USs), children, etc., who affect both their self-perceptions and satisfaction with training spaces.

The classroom environment becomes an opportunity for PSTs to understand issues related to the teaching profession, such as stress, emotional arousal, commitment, or burnout. Perceived self-efficacy is one determinant variable in studying PSTs' well-being and its relationship with these issues [7,8]. The socio-cognitive theory [9] defines perceived self-efficacy as the explanation of one's self-perceptions about one's competence: "perceived self-efficacy is a group of beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments" (p. 3). Perceived self-efficacy influences other variables involved in professional activity; for instance, Tschannen-Moran et al. [10,11] claimed that self-perceptions make teachers evaluate their abilities, knowledge, and attitudes toward teaching. Subsequent studies [12–15] explain the potential effect of perceived self-efficacy on satisfaction with one's actions; simultaneously, high job satisfaction along with several other factors also influences perceived self-efficacy. Thus, these two variables present an interconnection that affects self-regulation in learning processes and plays an essential role in the study of PSTs' well-being [6,16–18].

Perceived self-efficacy has been widely used in teacher professional development research [19,20]. This internal variable impacts teachers' willingness to deal with teaching opportunities and challenges throughout their careers. It directly relates to teachers' well-being since perceived self-efficacy affects how they feel in the workplace from psychological, social, and cognitive perspectives [9,21]. However, self-efficacy does not emerge when teachers enter the teaching profession; it arises during initial teacher education since future teachers experience specific self-perceptions of professional worth during this period when intervening and performing in educational settings [22]. Hence, the role of perceived self-efficacy in initial teacher education seems to need an extensive discussion to focus on caring for this self-perception at the right time, thus preventing future psychological and professional mismatches [23,24].

PSTs are university students whose studies are related to education (i.e., bachelor's degree in primary education, early childhood education, etc.)-educated and they present specific perceived self-efficacy related to their professional identity, teacher competencies, social relationships, etc. PSTs' perceived self-efficacy can be addressed as an element that affects professional development possibilities, understood as a continuous learning process in experiential settings [25,26]. Therefore, the perceived self-efficacy of PSTs need to be considered as a modulator for Initial Teacher Professional Development (ITPD) [27].

Considering the interactive and experiential character of ITPD, practicum experiences offer a wide area to explore predictors of perceived self-efficacy and job satisfaction. Satisfaction regards not only the professional action itself but also the environment in which the satisfaction arises and is framed [28]. In the practicum, perceived self-efficacy and job satisfaction can be investigated more easily than in the university classroom space due to several reasons: firstly, the student teaching experience is practical because it presents opportunities to act as professionals and interact with other educational agents [20,29]; secondly, it is an accurate and reliable workplace for PSTs since it represents what they will find when finishing their initial teacher training [30,31]; finally, it allows us to study ITPD opportunities indirectly. Therefore, improvements in the PSTs' well-being during this initial stage can be considered [32,33].

For all these reasons, this study aims to explore the perceived self-efficacy of PSTs toward their professional competencies during their practicum. It helps understand what implications these contexts create for PSTs' well-being, for instance, exploring the impact of perceived self-efficacy on PSTs' satisfaction with their performance and with their environment. Thus, it also allows understanding of how perceived self-efficacy is conditioned by satisfaction with the school climate and the classroom context. Hence, our research

addresses teachers' well-being through initial teacher education to contribute to a more sustainable teaching career. Our contribution consists of providing insights about the study's issue in order to reduce future investments in helping teachers in service to maintain their self-perceptions and satisfaction stable.

2. Background

2.1. *The Role of Perceived Self-Efficacy and Satisfaction in PST' Well-Being*

Following Bandura's framework [34], perceived self-efficacy shows how self-value involves a connection between expectations and the capability to address an issue. The author of [35] proposed four sources of modulation of self-efficacy. Perceived self-efficacy can be changed by: (a) performance accomplishments (i.e., self-instructed performance and its exposition), (b) vicarious experiences (i.e., observation of relevant models), (c) verbal persuasion (i.e., encouragement and verbal support), and (d) psychological states (i.e., emotional arousal). Hence, changes in perceived self-efficacy in educational contexts are generated by the influence and uncertainty produced by contextual factors since school contexts are unpredictable scenarios. Acquiring and developing teacher professional competencies enables PSTs both to build the confidence to apply this knowledge when dealing with stressful situations and to improve their perceived self-efficacy [36]. Therefore, it becomes a tool by which PSTs perceive themselves able to adapt to unexpected situations, showing autonomy and performance control [37].

On the other hand, this adaptation takes place primarily through professional development opportunities. However, most previous studies on teacher professional development consider only in-service teachers; beginning or novice teachers are "protagonists". Therefore, PSTs are left out of these growth occasions [38]. International institutions [25,27,39] address Initial Teacher Professional Development (ITPD) during initial teacher education programs at universities. It examines PSTs' first contact with teaching at the beginning of their teaching careers. The existence of this concept facilitates exploring PSTs' educational experiences to understand what becoming an educator implies from social and emotional dimensions [30,40].

ITPD, similar to traditional teacher professional development, influences PSTs' perspectives on students, educational systems, and opportunities for advancement. ITPD is mediated by personal and contextual features and directly correlates with self-perceptions and emotional self-regulation in learning spaces [7,41]. Moreover, ITPD offers vast research opportunities to explore perceived self-efficacy since it relates to students' achievements (children) and the school climate [42,43]. Indeed, the most relevant interaction agents for a positive school climate are children, colleagues, CTs, and USs [44].

Considering the sources of perceived self-efficacy from Bandura's theory, interactions with students and CTs could reasonably influence the perceived self-efficacy of teacher candidates [45]. Hence, interacting with educational agents develops contextual adjustments in the classroom space that improve PSTs' well-being. It involves pleasant perceptions during the teaching, which affects PSTs' satisfaction with these relationships and involvement in future professional networks [46,47]. Mastery experiences also work as pedagogical tools in ITPD opportunities in which CTs observe PSTs and give them feedback and encouragement, thus influencing the satisfaction with their competence development as professionals [18,48]. Simultaneously, this mechanism increases perceived self-efficacy, and consequently, PSTs embrace new strategies to improve their teaching with a higher engagement [49]. Colson et al. [50] highlighted the relevance of verbal persuasion and emotional arousal in changing perceived self-efficacy because it promotes rich self-reflection opportunities.

Thus, the four sources that modulate perceived self-efficacy from the socio-cognitive theory involve socialization as a common factor for ITPD opportunities through initial teacher education. Consequently, considering the development of perceived self-efficacy, its relationship with satisfaction seems crucial for the success of professionals since job satisfaction is viewed as a determinant variable for quality in education [51].

2.2. The Role of Practicum in the ITPD to Study the Relationship between Self-Efficacy and Satisfaction

ITPD research can be framed by practicum contexts when highlighting the importance of interactions. This analysis is guided by deepening PSTs' self-perceptions of their capability to learn as teachers. Thus, ITPD opportunities should allow PSTs to grow as professionals by reflecting on their practices at schools [52]. In contrast with teacher professional development programs, during the practicum, PSTs do not need to confront chosen realities, which means that they select neither strategies to improve nor content to learn because they still do not know the impact of their teaching at this point of their professional careers [53].

In this vein, the European Commission [54] focuses initial teacher education on developing interpersonal competencies (i.e., communicative skills) along with intrapersonal competencies (i.e., reflection, self-management, and decision-making) to reinforce their commitment to teaching as a career. This international institution [55–57] considers ITPD through practicum a cornerstone due to its relationship with specific competencies, such as planning, teamwork, autonomy, or technology management, that are developed within the universities' Bachelor's degree curriculums in education.

To address this issue, student teaching experiences allow PSTs to develop reflective processes about their well-being associated with acquiring and performing professional competencies during their stay in schools [33,58,59]. During the practicum, PSTs can measure and test their abilities, put their initial training into practice, and share spaces and activities to reflect with their CTs and USs [54]. Hence, analyzing ITPD will lead to strengthening PSTs' self-perceptions of professional worth for a greater engagement with teaching, making the profession more sustainable in the long term [60,61].

This study seeks to explore PSTs' well-being by identifying predictors of perceived self-efficacy and job satisfaction during the practicum. Working on this issue will increase ITPD opportunities in initial teacher education. Figure 1 presents the framework of the research.

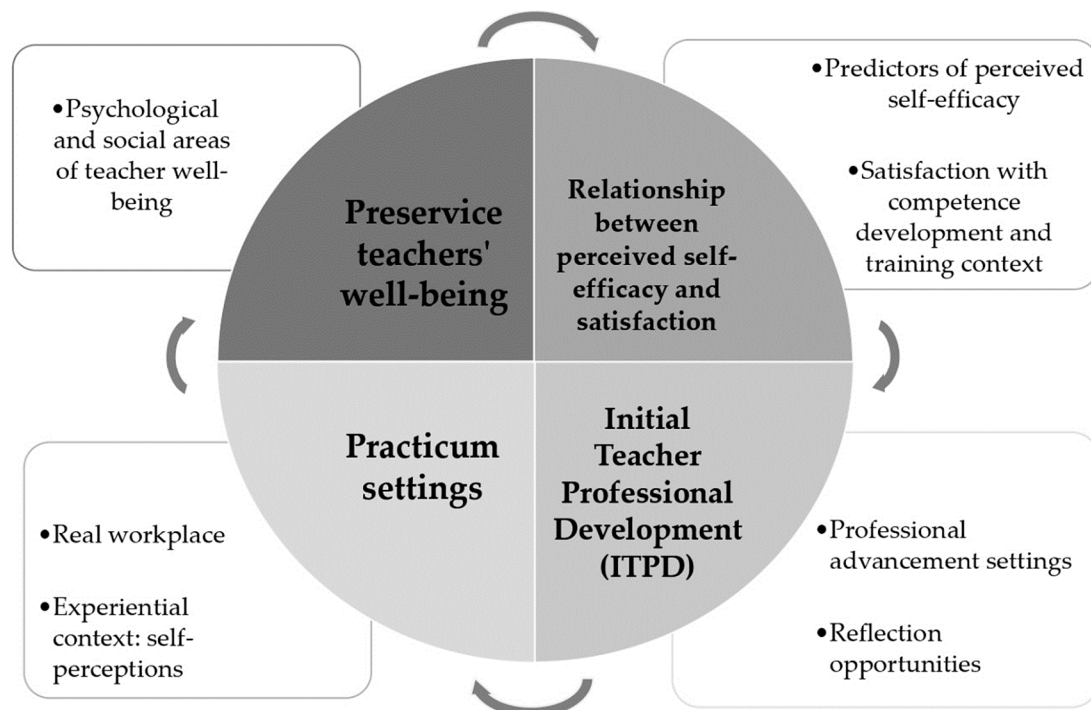


Figure 1. Base model for the research.

Considering this information, the following research questions frame the study: How does perceived self-efficacy toward teacher competencies change during the practicum?

What sources of perceived self-efficacy do PSTs highlight? Is there any relationship between perceived self-efficacy and satisfaction during the practicum? Which aspects are PSTs satisfied with?

3. Materials and Methods

3.1. Research Objectives

On the one hand, this study explores the perceived self-efficacy of PSTs of their professional competencies during field experiences. On the other hand, the study also searches for significant relationships between perceived self-efficacy and satisfaction with one's competence development and within the practicum setting. In this vein, it is examined how predictors of perceived self-efficacy and job satisfaction can impact the well-being involved in the ITPD.

The specific quantitative objectives are as follows:

- To investigate whether significant differences exist in the PSTs' perceived self-efficacy after the practicum.
- To explore the relationship between the perceived self-efficacy of PSTs, their satisfaction with their competence development, and the contextual factors of the practicum.

The specific qualitative objectives are as follows:

- To explore sources of perceived self-efficacy and satisfaction within practicum contexts from the PSTs' viewpoints.
- To analyze sources of perceived self-efficacy as modulators of well-being from the PSTs' perspectives.
- To investigate the satisfaction associated with the improvement of perceived self-efficacy from the participants' points of view.

3.2. Research Design

This research employed a mixed methodological design. Following research guidelines about professional well-being [6], this study combined a quantitative approach, conducted using a quasi-experimental, pre-test–post-test design, with a qualitative approach, conducted through two focus group sessions. Mixed methods research was selected due to its flexibility and depth, in which statistics and interpretation are combined to study self-efficacy perceptions [62–64]. Without a qualitative overview, quantitative information cannot obtain an in-depth view of perceived self-efficacy. The focus groups allow us obtain information on the PSTs' interactions and deepen their meaning-making of well-being during the practicum [65,66].

The quantitative approach involved designing and validating three specific Likert-type self-report scales regarding PSTs' perceived self-efficacy. Owing to the specificity of the topic and variables to explore, it was necessary to design our instrument. Data about perceived self-efficacy were collected before and after student teaching experiences; data on the PSTs' satisfaction with the experience were also collected. The quantitative data analysis focused on descriptive, correlational, and inferential procedures using the software SPSS (version 21, IBM® SPSS®, Chicago, IL, USA).

The two focus group sessions explored and deepened the predictors of perceived self-efficacy and their functions as modulators of well-being within the school context. The analysis of qualitative information was conducted using Atlas.ti software (version 7, ATLAS.ti Scientific Software Development GmbH, Berlin, Germany).

3.3. Research Context and Participants

This research was developed in the School of Education Sciences at the public University of Seville (Spain). This institution offers a four-year BA in Primary Education. During the fourth year, PSTs go to schools to do their practicum. Over two months, the PSTs spend five hours per day at school, supervising, teaching, observing, and collaborating with CTs.

The study population comprises 390 university students in their fourth year of the Primary Education BA ($N = 390$). A simple random sampling for finite samples [67] was conducted ($\sigma^2 \cdot p \cdot q / e^2 (N - 1) + \sigma^2 \cdot p \cdot q$) with a 95% confidence level ($\sigma = 95\%$) and a margin of error of 4 ($e = 4$). The previous equation presents: σ (confidence estimation), p (estimated percentage), q (equivalent to 100, as standard number, subtracting the estimated percentage), e (error), and N (population size). Of the 390 PST, 258 responses were obtained (79% women, 21% men) before and after the practicum.

Researchers applied convenience sampling [67] to select participants for two focus group sessions. The selection of this technique was based on the availability and willingness of the participants; thus, researchers invited PSTs to participate voluntarily when they collected post-practicum data at the university. Nine affirmative responses from eight women and one man were received. These PSTs participated in a focus group session three weeks before they finished their practicum. They also attended a second session after completing their internships.

Some ethical guidelines were followed to conduct the study [68]; participants were informed about the implications of collaboration, their responsibilities if agreed upon, and the treatment of their responses. A number code to pair the pre-test and post-test responses was used to preserve their anonymity. The participants were assigned numbers in the focus groups. Hence, virtual identities were preserved, and access to the scales before and after placement was assured. Moreover, researchers went twice to university classrooms to present their responses in an online format. The preparation of this manuscript did not involve sensitive content when using human subjects. However, ethical guidelines established by the Bioethical Committee from Universidad Loyola Andalucía were followed.

3.4. Instruments

3.4.1. Scales

Three online scales were designed and validated due to the specification of the contexts. The pre-test self-efficacy scale is called *The Perceived Self-Efficacy Scale related to Teacher Competencies (I)*. The post-test self-efficacy scale is called *The Perceived Self-Efficacy Scale related to Teacher Competencies (II)*. The post-test scale related to satisfaction with one's competence development and practicum context was called the *Satisfaction scale*. The *Perceived Self-Efficacy Scale related to Teacher Competencies (I)* was administered to the PSTs before they participated in practicum experiences, and the *Perceived Self-Efficacy Scale related to Teacher Competencies (II)*, and "*Satisfaction scale*" were provided afterward (see Appendix A).

The design of the perceived self-efficacy scales was based on competencies proposed by the European Commission [54] and the Practicum Program for BA Primary Education, to which the PST participants belong. According to the School of Education Sciences [69], acquiring specific competencies through the practicum contributes to PSTs' ITPD. It is also drawn on different European teaching standards and competencies to triangulate the instruments' content [57,70,71]; similar research proposals were also considered [32,72].

Finally, different competencies were included in the pre-test and post-test self-efficacy scales (see Appendix A). A post-test satisfaction scale was developed based on Durksen et al.'s proposal [47] to understand the sources of satisfaction with one's professional competence and the training environment. In perceived self-efficacy scales, the items are numbered from 1 to 7, with "i1–i7" as part of the pre-practicum scale and "i1P–i7P" as part of the post-test scale. In the satisfaction scale, items are numbered from 8 to 13 (i8P–i13P) (see Appendix A).

The participants responded using five-point Likert scales ranging from 1 (not at all) to 5 (very much). Cronbach's alpha was obtained to determine the reliability of the scales: the pre-test self-efficacy scale obtained an α score of 0.779, the post-test self-efficacy scale obtained $\alpha = 0.825$, and the post-test satisfaction scale obtained $\alpha = 0.792$. According to DeVellis [73], a Cronbach's alpha between 0.70 and 0.80 is a highly reliable value. An

exploratory factor analysis was conducted for a first approximation for internal consistency, considering a subsequent validation in the future. Varimax rotation was selected with eigenvalues greater than 1.0 and a cut-off loading of 0.55. One extracted factor in scale (I) explained 44.946% of the variance. Table 1 presents the factorial weights.

Table 1. Loadings for the perceived self-efficacy scale related to teacher competencies (I).

	Loading
i1. I perceive that I can adapt to different situations.	0.676
i2. I perceive that I can organize and plan my work.	0.604
i3. I perceive that I can create new social networks and empathetic relationships.	0.600
i4. I perceive that I am digitally competent.	0.551
i5. I perceive that I can resolve conflicts or issues.	0.822
i6. I perceive that I am competent in the decision-making process.	0.759
i7. I perceive that I can do different tasks autonomously.	0.636

In the post-test self-efficacy scale, two factors were found and explained 54.725% of the variance with eigenvalues greater than 1.0. As observed in the factor weights matrix (see Table 2), the first factor was shaped through items related to professional performance competencies, and the second was shaped through items related to autonomy and personal management competencies. Commonalities present coefficients lower than 0.55.

Table 2. Loadings for perceived self-efficacy scale related to teacher competencies (II).

	1	2
i1P. I perceive that I could adapt to different situations.	0.673	0.311
i2P. I perceive that I could organize and plan my work.	0.339	0.632
i3P. I perceive that I could create new social networks and empathetic relationships.	0.550	0.044
i4P. I perceive that I was digitally competent.	0.666	−0.043
i5P. I perceive that I could resolve conflicts or issues.	0.630	0.512
i6P. I perceive that I was competent in the decision-making process.	0.505	0.586
i7P. I perceive that I could do different tasks autonomously.	−0.233	0.839

Finally, one factor in the post-test satisfaction scale explains 51.157% of the variance (see Table 3).

Table 3. Loadings for the satisfaction scale.

	Loading
i8P. I am satisfied with my daily work environment	0.775
i9P. I am satisfied with my competence in facing challenges and issues	0.591
i10P. I am satisfied with the professional tutor's support	0.626
i11P. I am satisfied with the feedback and recommendations	0.719
i12P. I am satisfied that I have been helpful in the schools	0.793
i13P. I am satisfied with my engagement with the internship as a professional	0.763

3.4.2. Focus Group Sessions

Both focus group sessions tried to identify the most significant sources of changes in perceived self-efficacies of PSTs and the factors and agents that intervene in their satisfaction with their job environment, thus identifying possible predictors of self-efficacy and sources of satisfaction within practicum contexts. The first session took 60 min; the second one took 90 min. Both sessions were conducted in university classrooms. The initial questions in both moments were based on the protocol used by Izadinia [74] to promote reflection related to the self and the influence of the context. Researchers tried to stimulate discussions in a non-threatening way. Some examples of the questions asked are: *How would you describe*

your performance at the schools? What stands out about your relationships with the CTs and the children throughout the experience?

The sessions were audio recorded. Although researchers structured the analysis from previously validated protocols, an inductive approach was followed to collect and analyze information. Two thematic axes were proposed, and the following subcategories arose:

- Main axis: school social environment [75,76]:
 - a. Arisen subcategory 1a: Influence of professional models as references.
 - b. Arisen subcategory 1b: Emotions through interactions.
- Main axis: PSTs' performance [77]:
 - c. Arisen subcategory 2c: Management of teaching performance.
 - d. Arisen subcategory 2d: Highlighted attitudes.
 - e. Arisen subcategory 2e: Highlighted competencies.

3.5. Data Analysis

To obtain quantitative information, descriptive and inferential analyses and some correlations were conducted using SPSS. For qualitative information, to ensure accuracy, a content-thematic analysis was used following Miles and Huberman's [78] analysis sequence, using Atlas.ti: Transcriptions—Addition of notes—Memos—Identification of general categories—Several readings: first approximation to subcategories—Triangulation process to control reliability and identify bias—Codification—Categorization—Individual interpretation—Group interpretation.

4. Results

The findings are presented according to the research objectives.

4.1. Quantitative Objectives

4.1.1. Changes in Perceived Self-Efficacy

The KMO and Bartlett test was conducted to select the most suitable inferential analyses to answer the quantitative objectives. The results were $KMO = 0.757$, $p < 0.005$. The Wilcoxon signed-rank test is a nonparametric test selected to explore the existence of differences in perceived self-efficacy. Statistically significant differences ($p < 0.000$) in perceived self-efficacy toward all teacher competencies were found after the practicum. Table 4 shows the findings.

Table 4. Wilcoxon signed-rank test.

	Z	Sig
i1. I perceive that I can adapt to different situations—i1P. I perceive that I could adapt to different situations.	−6.852	0.000
i2. I perceive that I can organize and plan my work—i2P. I perceive that I could organize and plan my work.	−5.384	0.000
i3. I perceive that I can create new social networks and empathetic relationships—i3P. I perceive that I could create new social networks and empathetic relationships.	−6.223	0.000
i4. I perceive that I am digitally competent—i4P. I perceive that I was digitally competent.	−8.481	0.000
i5. I perceive that I can resolve conflicts or issues—i5P. I perceive that I could resolve conflicts or issues.	−8.203	0.000
i6. I perceive that I am competent in the decision-making process—i6P. I perceive that I was competent in the decision-making process.	−7.012	0.000
i7. I perceive that I can do different tasks autonomously—i7P. I perceive that I could do different tasks autonomously.	−7.943	0.000

4.1.2. Relationship between Perceived Self-Efficacy and Satisfaction

Descriptive analyses of the satisfaction scale showed high satisfaction with the experience in general. However, the lowest mean score (3.0) was found for the satisfaction with USs' role. By contrast, a high satisfaction (4.5) was found with one's professional performance.

A Spearman's rank-order correlation was conducted to determine the relationship between perceived self-efficacy and satisfaction. A statistically significant relationship was found in levels of self-efficacy before and after student teaching experiences ($p < 0.001$). Moreover, a more robust relationship exists between perceived self-efficacy after the practicum and satisfaction with one's capabilities ($p < 0.000$). Table 5 shows the results.

Table 5. Spearman correlation.

	Perceived Self-Efficacy Pre-Test	Satisfaction Scale	
Perceived Self-Efficacy Pre-test	Coefficient	1	0.107
	Sig.		0.113
Perceived Self-Efficacy Post-test	Coefficient	0.220 *	0.493 *
	Sig.	0.001	0.000

* $p \leq 0.001$.

4.2. Qualitative Objectives

The analysis shows a narrative structure toward two dimensions: (1) PSTs' performances at the school; and (2) their relationships at the schools. Table 6 presents the categories and subcategories.

Table 6. Structured generated through focus group sessions.

	(1) Social Environment		(2) Teaching Performance		
	Subcategories		Subcategories		
	(1a) Influence of professional references	(1b) Emotions from interactions with the context	(2a) Management of teacher performance	(2b) Highlighted attitudes	(2c) Highlighted abilities
Total frequency of appearance	31	30	25	26	28

The first category of Social Environment comprises two subcategories: 1a and 1b. In subcategory 1a, the PSTs highlight changes in their perceived self-efficacy due to relationships, firstly, with children in the classroom, and secondly, with CTs, colleagues, or the school principal. However, the PSTs perceived a poor follow-up from their USs and a lack of support from their CTs on several occasions. From the PSTs' perspective in the first focus group, loneliness and insecurity meant negative affection felt toward CTs and USs: "I have been sad because I have to decide sometimes everything alone... I'd like to develop teacher strategies faster. . . . I'm proud of what I'm achieving although my mentor is not there" (Participant 9). "I miss sharing what I observe in and out of the classroom; it'd have been interesting to receive more feedback for future improvements" (Participant 2).

In subcategory 1b, the PSTs mention that excitement was present throughout the student teaching experience. Different emotional states increased their perceived self-efficacy toward coping with uncertainty:

Some colleagues in the school invited me to share materials and resources . . . I was being treated as a partner, not as a student. That made me feel strong, and I started to be part of their team. That's something really powerful when you need some proof you're capable of being a teacher. (Participant 7)

When I discovered how special education needs students made tremendous efforts to be in class, I understood I could not be a plant in the classroom: I forced myself to pay attention to what is important: being there for these children, no matter the time I needed to invest. If my tutor was not there enough for me, I would not repeat that model with children. (Participant 1)

Bandura [8] considered emotional arousal (i.e., pleasure and happiness while performing) and mastery experiences were sources of perceived self-efficacy since they helped PSTs to feel more capable, motivated, and satisfied. These sources modulated perceived self-efficacy because the PSTs needed to adapt their strategies. A modulation process from emotional arousal enabled the PSTs to control their emotions when they perceived themselves as less competent. Specifically, according to the second focus group, children who generated positive emotional responses were leading social agents:

I'm becoming a teacher thanks to children. They push me out of my comfort zone, which excites me in the mornings. The cooperating teacher gives me some advice after seeing me in the classroom; however, I expected more help. I feel alone, sad, and nervous because I don't know how to adapt my teaching. (Participant 5)

The second category comprised three subcategories: 2a, 2b, and 2c. In subcategory 2a, the PSTs perceived themselves as professionals facing school demands. They were confident and proactive that they had shown forcefulness to make decisions; however, they recognized during the second focus group that they acted according to limited previous knowledge: "I think I've been autonomous: I was able to provide what they needed, but I'm conscious that they expected to find a more prepared teacher" (Participant 6). "My digital competence is a disaster, but I planned everything really well. I used devices and apps to contribute something new" (Participant 8).

Mastery experiences and social interactions made the PSTs feel insecure but autonomous; these two mechanisms could intervene in their identities as teachers in the classroom because their emotional responses modulated their self-perceptions as professionals. In subcategories 2b and 2c, participants pointed out their resilience in dealing with "reality shocks".

You don't know precisely why some decisions are made before you arrive at the school, so I did not question anything. However, it made me think about my role as an educator. I will not make these decisions in the future; that's something I learned thanks to the practicum: your teacher profile (identity) is constantly under construction (. . .) that made me feel satisfied with my criteria because I was testing it all the time with the students, meeting their academic demands. (Participant 2)

Coping strategies generated a post-action reflection about the accuracy and suitability of their performance. From their perspective in the last session, the emotional dimension influenced their competence development strongly: "My tutor was more worried about curriculum and school objectives. He did not have enough time for me when he asked to address special needs, but I tried to show autonomy" (Participant 1).

"I felt comfortable when I felt the children paid attention. That helped me explain a lesson; however, if they detected any mistake in my speech, I started to feel anxious; that made me reflect less about what I was doing". (Participant 7)

Next, Figure 2 outlines the connections from qualitative analyses.

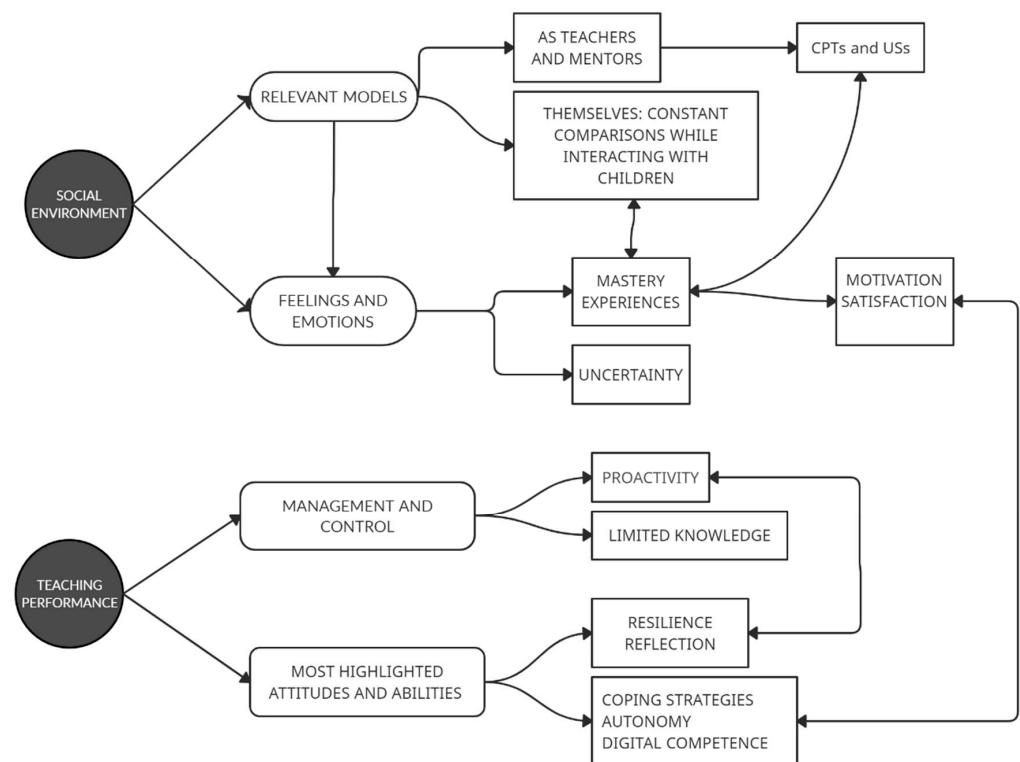


Figure 2. Connections map from qualitative analysis.

5. Discussion

This study explored the predictors of perceived self-efficacy in PSTs during the practicum. It also investigated the relationship between perceived self-efficacy and satisfaction of PSTs with their competence development during the practicum and with the training environment. In this vein, we explored how changes in perceived self-efficacy and the role of satisfaction could impact PSTs' well-being. Findings suggest the value of considering self-efficacy and satisfaction in practicum contexts for understanding PSTs' self-perceptions from an accurate point of view regarding ITPD opportunities.

In line with Huang et al. [79] and Yildirim [6], this research shows how social demands from pupils and schools presented changes in perceived self-efficacy of PSTs, affecting their emotional states and job satisfaction, and it can impact the rates of teachers dropping out. Hence, these factors can influence the understanding of well-being associated with experiences in practicum contexts [80]. From our participants' viewpoints, they became emotionally involved in their practicum. However, some implications for their professional well-being were found, such as a sense of loneliness, abandonment, or a positive satisfaction with the classroom climate when they controlled their teaching. Based on this finding, perceived self-efficacy is a precise indicator to enquire about well-being in initial teacher education [81]. Changes in this self-perception explain how social relationships and mastery experiences, which are expected in a professional environment, positively influenced PSTs' feelings in general. Hence, PSTs' satisfaction with their competence development was also positively affected.

Regarding the research's objectives, significant differences were found in PSTs' perceived self-efficacy after practicum experiences. Changes were present in all proposed competencies. Unlike other studies that show a decrease or no change in self-efficacy [82], our results show a relationship between personal variables' and contextual variables' influences on the self-perceptions framed by the practicum. In addition, regarding satisfaction with own's competence development, a relationship between improved perceived self-efficacy and high satisfaction with competence development leads to professional development opportunities onwards [23,24,83]. Simultaneously, in line with Toropova et al. [84], the

workplace's characteristics, such as ITPD opportunities and experienced improvements in teacher efficacy, affects their level of satisfaction with their daily jobs. Qualitative information was helpful with the quantitative data to determine predictors of perceived self-efficacy and its changes throughout the practicum experience. Aligned with González et al. [29], a correspondence was explicitly found between changes in perceived self-efficacy and planning, decision-making, and autonomy. In addition, findings from both focus group sessions proposed external agents (i.e., children, CTs) as influential factors in PSTs' sense of security during the practicum. It created both satisfaction with one's actions and responses to external demands, pressure, and discomfort in their daily routines.

Concerning perceived self-efficacy sources, Bandura [9] pointed out vicarious experiences and verbal persuasion as essential sources in learning spaces. However, our findings highlight that the PSTs did not value them, which supported Poulou's findings [85]. Conversely, as Tschannen-Moran and Hoy [11] explained, the PSTs highlighted interactive mastery experiences and the impact of psychological states as primary sources of improvement in their perceived self-efficacy, thus becoming predictors of this self-perception. In addition, from PSTs' points of view, feedback was weak since they felt alone when making decisions and dealing with unpredictable situations. At this point of the research, it is worth differentiating between verbal persuasion and feedback from CTs and USs. Qualitative information showed that PSTs used different coping strategies to overcome the lack of support, which may be due to a strong perception of their autonomy competence.

Some studies have noted the importance of developing constructive relationships between PSTs, CTs, and USs [44,86]. In our research, the relationships between PSTs and children are connected to the emotional states of PSTs and improved their self-perceptions. Hence, perceived self-efficacy is related to reflective processes and emotional excitement: positive emotions came from successful interactions, while negative emotions generated coping strategies (i.e., adaptation and resilience) when facing disappointments with professional advice and unsuccessful performances. These findings are supported by the research of Han et al. [87], which points out the importance of reflection in improving self-perceptions.

Finally, changes in perceived self-efficacy relate to improving classroom management and to the belief that the practicum is an opportunity for professionalization, thus connecting it with PSTs' satisfaction with their environment. In this vein, Kassis et al. [88] highlight a mutual benefit between school settings and the university context to reinforce the engagement of PSTs toward teaching as a career.

In line with Yada et al. [44], this study highlights the relevance of CTs' support as an influential factor in improving PSTs' well-being. A supportive environment and empathetic language are crucial elements in promoting security and self-confidence. Although PSTs showed general satisfaction, they were dissatisfied with the mentors' roles. Previous research has demonstrated the mediation of CTs and USs in providing professional advice that positively influences the PSTs' experience valuations [32,89].

6. Conclusions

Changes in perceived self-efficacy and satisfaction with the practicum influence PSTs' well-being. This study encourages consciously investigating this type of setting to understand the role of perceived self-efficacy and job satisfaction in improving the preparation of future teachers.

To do so, studying ITPD through the practicum is an adequate research pathway considering the difficulty of exploring perceived self-efficacy in university courses, which is less experiential and more distant from the educational reality. Moreover, looking at the practicum provides a deeper insight, and helps avoid forgetting about or abandoning this period for the ITPD. These interrelationships allow us to point out the PSTs' well-being, thus the teachers' well-being. Therefore, searching for improvement mechanisms of perceived self-efficacy and satisfaction during initial teacher education will support PSTs when they reach future professional stages (i.e., in-service teaching). Hence, the teaching career will

be more sustainable as it will not need to constantly motivate and assist teachers, and it will avoid creating stressors instead of professional development opportunities.

Another relevant conclusion from this study is the consideration of interactions with children as a powerful predictor of PSTs' perceived self-efficacy and increased satisfaction with the practicum. On the contrary, a lack of support from CTs and USs exists; however, it did not negatively affect their perceived self-efficacy or satisfaction with the experience. The role and implication of these two mentors are also a predictor of perceived self-efficacy, although it showed the opposite effect when they provided a poor follow-up to the PSTs. An action recommended by this study is to strengthen CTs' and USs' training in terms of professional advice in practicum contexts.

The lack of support and attention reported by the participants also directs us to think about the workload, tiredness, and lack of time that CTs and USs face, which affects their abilities to develop their responsibilities appropriately [90,91]. Personal-emotional havoc could weaken professional well-being, thus causing PST burnout. This study is aligned with previous ones [92,93], which support the consideration of efficacy beliefs and job satisfaction when studying PSTs' well-being to collaborate with the well-being of teachers in service. Therefore, creating sustainable working conditions will improve the well-being of future generations of teachers.

Some limitations can be found throughout this research. According to Ma et al. [64], specific items in the design scales should be restructured to obtain a better adjustment for confirmatory validation. Additionally, the focus group sessions may offer a limited perspective based on the number of participants. Nevertheless, qualitative information was essential in this study, as previous works called for mixed methods research designs.

Author Contributions: Conceptualization, I.G.-L.; Data Curation, I.G.-L. and J.C.-J.; Formal Analysis, I.G.-L. and M.P.C.-B.; Investigation, I.G.-L.; Methodology, I.G.-L. and M.P.C.-B.; Resources, I.G.-L.; Software, I.G.-L.; Supervision, I.G.-L. and J.C.-J.; Validation, I.G.-L. and J.C.-J.; Visualization, I.G.-L.; Writing—Original Draft, I.G.-L. and M.P.C.-B.; Writing—Review & Editing, I.G.-L. and J.C.-J. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: Ethical review and approval were waived for this study due to any physical or ethical risks were taken for participants.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: The data that has been originated during the research project is available on request from the corresponding author (igarcia@uloyola.es).

Acknowledgments: Authors appreciate the help of colleagues involved in the brainstorming ideas and bibliography search during the manuscript's construction.

Conflicts of Interest: The authors declare no conflict of interest.

Appendix A

Table A1. Pre-test scale: Perceived self-efficacy scale related to teacher competencies (I).

	1	2	3	4	5
i1. I perceive that I can adapt to different situations.					
i2. I perceive that I can organize and plan my work.					
i3. I perceive that I can create new social networks and empathetic relationships.					
i4. I perceive that I am digitally competent.					
i5. I perceive that I can resolve conflicts or issues.					
i6. I perceive that I am competent in the decision-making process.					
i7. I perceive that I can do different tasks autonomously.					

Table A2. Post-test scale: Perceived self-efficacy scale related to teacher competencies (II).

	1	2	3	4	5
i1P. I perceive that I could adapt to different situations.					
i2P. I perceive that I could organize and plan my work.					
i3P. I perceive that I could create new social networks and empathetic relationships.					
i4P. I perceive that I was digitally competent.					
i5P. I perceive that I could resolve conflicts or issues.					
i6P. I perceive that I was competent in the decision-making process.					
i7P. I perceive that I could do different tasks autonomously.					

Table A3. Post-test scale: Satisfaction scale.

	1	2	3	4	5
i8P. I am satisfied with my daily work environment.					
i9P. I am satisfied with my competence in facing challenges and issues.					
i10P. I am satisfied with the professional tutor's support.					
i11P. I am satisfied with feedback and recommendations that I received.					
i12P. I am satisfied that I have been helpful in the schools.					
i13P. I am satisfied with my engagement with the internship as a professional.					

References

1. Anglim, J.; Horwood, S.; Smillie, L.D.; Marrero, R.J.; Wood, J.K. Predicting psychological and subjective well-being from personality: A meta-analysis. *Psychol. Bull.* **2020**, *146*, 279–323. [[CrossRef](#)] [[PubMed](#)]
2. Blanco, A.; Díaz, D. El bienestar social: Su concepto y medición. *Psicothema* **2005**, *17*, 582–589.
3. Hascher, T.; Waber, J. Teacher well-being: A systematic review of the research literature from the year 2000–2019. *Educ. Res. Rev.* **2021**, *34*, 1–25. [[CrossRef](#)]
4. Corcoran, R.P.; O'Flaherty, J. Social and emotional learning in teacher preparation: Pre-service teacher well-being. *Teach. Teach. Educ.* **2022**, *110*, 103563. [[CrossRef](#)]
5. Lauermaann, F.; König, J. Teachers' professional competence and wellbeing: Understanding the links between general pedagogical knowledge, self-efficacy and burnout. *Learn. Instr.* **2016**, *45*, 9–19. [[CrossRef](#)]
6. Yildirim, K. Testing the main determinants of teachers' professional well-being by using a mixed method. *Teach. Dev.* **2015**, *19*, 59–78. [[CrossRef](#)]
7. Granziera, H.; Perera, H.N. Relations among Teachers' Self-Efficacy Beliefs, Engagement, and Work Satisfaction: A Social Cognitive View. *Contemp. Educ. Psychol.* **2019**, *58*, 75–84. [[CrossRef](#)]
8. Reilly, E.; Dhingra, K.; Boduszek, D. Teachers' self-efficacy beliefs, self-esteem, and job stress as determinants of job satisfaction. *Int. J. Educ. Manag.* **2014**, *28*, 365–378. [[CrossRef](#)]
9. Bandura, A. Self-efficacy: Toward a unifying theory of behavioural change. *Adv. Study Behav.* **1978**, *1*, 191–215. [[CrossRef](#)]
10. Tschannen-Moran, M.; Hoy, A.; Hoy, W. Teacher efficacy: Its meaning and measure. *Rev. Educ. Res.* **1998**, *68*, 202–248. [[CrossRef](#)]
11. Tschannen-Moran, M.; Hoy, A. The differential antecedents of self-efficacy beliefs of novice and experienced teachers. *Teach. Teach. Educ.* **2007**, *23*, 944–956. [[CrossRef](#)]
12. Farhadiba, D.; Wulyani, A.N. Investigating Preservice Teachers' Efficacy Level and Factors Influencing It. *KnE Soc. Sci.* **2020**, *4*, 40–49. [[CrossRef](#)]
13. Nghia, T.; Duyen, N. Developing and validating a scale for evaluating internship-related learning outcomes. *High. Educ.* **2019**, *77*, 1–18. [[CrossRef](#)]
14. Aldridge, J.M.; Fraser, B.J. Teachers' views of their school climate and its relationship with teacher self-efficacy and job satisfaction. *Learn. Environ. Res.* **2016**, *19*, 291–307. [[CrossRef](#)]
15. Burić, I.; Moè, A. What makes teachers enthusiastic: The interplay of positive affect, self-efficacy and job satisfaction. *Teach. Teach. Educ.* **2020**, *89*, 103008. [[CrossRef](#)]
16. Canrinus, E.T.; Helms-Lorenz, M.; Beijjaard, D.; Buitink, J.; Hofman, A. Self-efficacy, job satisfaction, motivation and commitment: Exploring the relationships between indicators of teachers' professional identity. *Eur. J. Psychol. Educ.* **2021**, *27*, 115–132. [[CrossRef](#)]
17. Cerezo, R.; Fernández, E.; Amieiro, N.; Valle, A.; Rosario, P.; Núñez, J.C. Mediating Role of Self-efficacy and Usefulness Between Self-regulated Learning Strategy Knowledge and its Use. *Rev. Psicodidactica* **2019**, *24*, 1–8. [[CrossRef](#)]

18. Clark, S.; Newberry, M. Are we building preservice Teacher self-efficacy? A large-scale study examining teacher education experiences. *Asia-Pac. J. Teach. Educ.* **2019**, *47*, 32–47. [CrossRef]
19. Ávalos, B. Teacher professional development in Teaching and Teacher Education over ten years. *Teach. Teach. Educ.* **2011**, *27*, 10–20. [CrossRef]
20. Bautista, A.; Ortega-Ruiz, R. Desarrollo Profesional Docente: Perspectivas y Enfoques Internacionales. *Psy. Soc. Educ.* **2015**, *7*, 343–356. [CrossRef]
21. Wang, L.; Tan, L.; Li, J.; Tan, I.; Lim, X. A qualitative inquiry on sources of teacher efficacy in teaching low-achieving students. *J. Educ. Res.* **2016**, *110*, 1–11. [CrossRef]
22. Ulvik, M.; Helleve, I.; Smith, K. What and how student teachers learn during their practicum as a foundation for further professional development. *Prof. Dev. Educ.* **2018**, *44*, 638–649. [CrossRef]
23. Chesnut, S. On the measurement of preservice teacher commitment: Examining the relationship between four operational definitions and self-efficacy beliefs. *Teach. Teach. Educ.* **2017**, *68*, 170–180. [CrossRef]
24. Chesnut, S.; Burley, H. Self-efficacy as a predictor of commitment to the teaching profession: A meta-analysis. *Educ. Res. Rev.* **2015**, *15*, 1–16. [CrossRef]
25. Ministerio de Educación y Formación Profesional. *La formación inicial del profesorado en España: Análisis de los planes de estudio tras una década desde su implementación*; Ministerio de Educación, Cultura y Deporte: Madrid, Spain, 2019. Available online: <https://sede.educacion.gob.es/publiventa/la-formacion-inicial-del-profesorado-en-espana-analisis-de-los-planes-de-estudios-tras-una-decada-desde-su-implementacion/educacion-infantil-y-primaria-educacion-secundaria-formacion-profesores/23106> (accessed on 4 August 2022).
26. Schunk, D.; Pajares, F. The development of academic self-efficacy. In *Development of Achievement Motivation*; Wigfield, A., Eccles, S.J., Eds.; A Volume in the Educational Psychology Series; Academic Press: Cambridge, MA, USA, 2002; pp. 15–31. [CrossRef]
27. Department of Education from the United Kingdom. *The Teacher Education Partnership Handbook (Issue August)*; Department of Education from the United Kingdom publications: London, UK, 2010. Available online: <https://www.education-ni.gov.uk/articles/teacher-education-partnership-handbook> (accessed on 28 July 2022).
28. Demur, S. The Role of Self-Efficacy in Job Satisfaction, Organizational Commitment, Motivation and Job Involvement. *Eurasian J. Educ. Res.* **2020**, *20*, 205–224. [CrossRef]
29. González, M.; Fuentes, E. El Practicum en el aprendizaje de la profesión docente. *Rev. Educ.* **2011**, *354*, 47–70.
30. Scott, L.; Gentry, R.; Phillips, M. Making preservice teachers better: Examining the impact of a practicum in a teacher preparation program. *Educ. Res. Rev.* **2014**, *9*, 294–301. [CrossRef]
31. Dreer, B. Towards a better understanding of psychological needs of student teachers during field experiences. *Eur. J. Teach. Educ.* **2020**, *43*, 676–694. [CrossRef]
32. Martins, M.; Costa, J.; Onofre, M. Practicum experiences as sources of pre-service teachers' self-efficacy. *Eur. J. Teach. Educ.* **2015**, *38*, 263–279. [CrossRef]
33. Van Schagen Johnson, A.; La Paro, K.M.; Crosby, D.A. Early Practicum Experiences: Preservice Early Childhood Students' Perceptions and Sense of Efficacy. *Early Child. Educ. J.* **2017**, *45*, 229–236. [CrossRef]
34. Bandura, A. On the functional properties of perceived self-efficacy revisited. *J. Manag.* **2012**, *38*, 9–44. [CrossRef]
35. Bandura, A. Perceived Self-Efficacy in Cognitive Development and Functioning. *Educ. Psychol.* **1993**, *28*, 139–161. [CrossRef]
36. González, A.; Conde, A.; Díaz, P.; García, M.; Rico, C. Instructors' teaching style: Relation with competences, self-efficacy and commitment in pre-service teachers. *High. Educ.* **2018**, *75*, 625–642. [CrossRef]
37. von Suchodoletz, A.; Jamil, F.; Larsen, R.; Hamre, B. Personal and contextual factors associated with growth in preschool teachers' self-efficacy beliefs during a longitudinal professional development study. *Teach. Teach. Educ.* **2018**, *75*, 278–289. [CrossRef]
38. Besser, M.; Leiss, D.; Blum, W. Who participates in which type of teacher professional development? Identifying and describing clusters of teachers. *Teach. Dev.* **2020**, *24*, 293–314. [CrossRef]
39. Government of New South Wales. Pre-Service Teachers. In *Preservice Teachers Resources*; NSW Government: Sydney, Australia, 2022. Available online: <https://education.nsw.gov.au/teaching-and-learning/professional-learning/pl-resources/pre-service-teacher-resources/pre-service-teachers> (accessed on 28 July 2022).
40. Menon, D.; Azam, S. Investigating Preservice Teachers' Science Teaching Self-Efficacy: An Analysis of Reflective Practices. *Int. J. Sci. Math. Edu.* **2020**, *19*, 1587–1607. [CrossRef]
41. Zee, M.; Koomen, H.M.Y. Teacher Self-Efficacy and Its Effects on Classroom Processes, Student Academic Adjustment, and Teacher Well-Being. *Rev. Educ. Res.* **2016**, *86*, 981–1015. [CrossRef]
42. Girvan, C.; Conneely, C.; Tangney, B. Extending experiential learning in teacher professional development. *Teach. Teach. Educ.* **2016**, *58*, 129–139. [CrossRef]
43. Vangrieken, K.; Meredith, C.; Packer, T.; Kyndt, E. Teacher communities as a context for professional development: A systematic review. *Teach. Teach. Educ.* **2017**, *61*, 47–59. [CrossRef]
44. Mena, J.; Hennissen, P.; Loughran, J. Developing preservice teachers' professional knowledge of teaching: The influence of mentoring. *Teach. Teach. Educ.* **2017**, *66*, 47–59. [CrossRef]
45. Yada, A.; Tolvanen, A.; Malinen, O.; Matsumura, K.; Shimada, K.; Koike, R.; Savolainen, H. Teachers' self-efficacy and the sources of efficacy: A cross-cultural investigation in Japan and Finland. *Teach. Teach. Educ.* **2019**, *81*, 13–24. [CrossRef]

46. Ferris, J.C.; Samuel, C. A Self-Defined Professional Development Approach for Current and Aspiring Educational Developers. *Teach. Learn. Inq.* **2020**, *8*, 208–220. [CrossRef]
47. Durksen, T.; Klassen, R.; Daniels, L. Motivation and collaboration: The keys to a developmental framework for teachers' professional learning. *Teach. Teach. Educ.* **2017**, *67*, 53–66. [CrossRef]
48. Doménech-Betoret, F.; Abellán-Roselló, L.; Gómez-Artiga, A. Self-Efficacy, Satisfaction, and Academic Achievement: The Mediator Role of Students' Expectancy-Value Beliefs. *Front. Psychol.* **2017**, *8*, 1193. [CrossRef]
49. Serrano-Rodríguez, R.; Pérez-Gracia, E.; Oteros, J.; Carpio, A.J. To what extent do preservice teachers feel ready to teach? A case study in the Master's Degree in Teaching in Secondary Education. *Aula Abierta* **2021**, *50*, 535–544. [CrossRef]
50. Colson, T.; Sparks, K.; Berridge, G.; Frimming, R.; Willis, C. Pre-service Teachers and Self-Efficacy: A Study in Contrast. *DCSE* **2018**, *8*, 66–76. [CrossRef]
51. Türkoglu, M.E.; Cansoy, R.; Parlar, H. Examining Relationship between Teachers' Self-Efficacy and Job Satisfaction. *Univers. J. Educ. Res.* **2017**, *5*, 765–772. [CrossRef]
52. Kennedy, M. How Does Professional Development Improve Teaching? *Rev. Educ. Res.* **2016**, *86*, 945–980. [CrossRef]
53. Martín, E. Pathways that converge in teacher professional development. Are they present in Spain? *Psychol. Soc. Educ.* **2015**, *7*, 442–458. [CrossRef]
54. European Commission. *Supporting Teacher Competence Development for Better Learning Outcomes*; European Commission: Paris, France, 2013. Available online: https://www.academia.edu/6623391/Supporting_teacher_competence_development_for_better_learning_outcomes (accessed on 12 September 2021).
55. European Commission. *Literature Review. Thematic Working Group. 'Professional Development of Teachers'. Teachers' Core Competencies: Requirements and Development*; European Commission: Paris, France, 2011; pp. 1–28. Available online: https://www.researchgate.net/publication/344906332_Literature_review_Teachers_T1_textquoteright_core_competences_requirements_and_development (accessed on 12 September 2021).
56. European Commission. Education and Training Monitor. Country analysis: Spain. In *Education and Training Monitor 2020*; European Commission, Ed.; Country Analysis; European Commission: Paris, France, 2020; pp. 263–273. Available online: <https://op.europa.eu/webpub/eac/education-and-training-monitor-2020/countries/spain.html> (accessed on 15 January 2022).
57. European Commission. Initial Education for Teachers Working in Early Childhood and School Education in Germany. 2019. Available online: <https://eurydice.eacea.ec.europa.eu/> (accessed on 26 April 2022).
58. Gan, Z.; Liu, F.; Yang, C.C. Student-teachers' self-efficacy for instructing self-regulated learning in the classroom. *J. Educ. Teach.* **2020**, *46*, 120–123. [CrossRef]
59. Tang, S.; Cheng, M.; Wong, A. The preparation of pre-service student teachers' competence to work in schools. *J. Educ. Teach.* **2016**, *42*, 149–162. [CrossRef]
60. Acton, R.; Glasgow, P. Teacher wellbeing in neoliberal contexts: A review of the literature. *Aust. J. Teach. Educ.* **2015**, *40*, 99–114. [CrossRef]
61. Cebrián, G.; Junyent, M. Competencies in Education for Sustainable Development: Exploring the Student Teacher's Views. *Sustainability* **2015**, *7*, 2768–2786. [CrossRef]
62. Flick, U.; von Kardorff, E.; Steinke, I. *A Companion to Qualitative Research*; SAGE Publications: London, UK, 2004.
63. Glackin, M.; Hohenstein, J. Teachers' self-efficacy: Progressing qualitative analysis. *Int. J. Res Method Educ.* **2017**, *41*, 271–290. [CrossRef]
64. Ma, K.; Trevethan, R.; Shuhong, L. Measuring Teacher Sense of Efficacy: Insights and Recommendations Concerning Scale Design and Data Analysis from Research with Preservice and Inservice Teachers in China. *Front. Educ. China* **2020**, *14*, 612–686. [CrossRef]
65. Panyan, M.; Hillman, S.; Liggett, A. The role of focus groups in evaluating and revising teacher education programs. *Teach. Educ. Spec. Educ.* **1997**, *20*, 37–46. [CrossRef]
66. Williams, A.; Katz, L. The Use of Focus Group Methodology in Education: Some Theoretical and Practical Considerations. *Int. Elect. J. Leadersh. Learn.* **2001**, *5*, 1–10.
67. Emerson, R. Convenience sampling, random sampling, and snowball sampling: How does sampling affect the validity of research? *J. Vis. Impair. Blind.* **2015**, *109*, 164–168. [CrossRef]
68. *Organic Law 15/1999*; Which Regulates the Protection of Personal Data. Boletín Oficial del Estado (BOE), 298. Ministry of the Presidency: Madrid, Spain, 2013. Available online: <https://www.boe.es/boe/dias/1999/12/14/pdfs/A43088-43099.pdf> (accessed on 26 April 2022).
69. School of Education Sciences. Report: Internship Program for Primary Education Degree at the Faculty of Education Sciences. 2020. Available online: https://fcce.us.es/practicass_primaria (accessed on 11 February 2022).
70. Department of Education from the United Kingdom. Teachers' Standards Overview. 2011. Available online: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/665522/Teachers_standard_information.pdf (accessed on 12 September 2021).
71. Ministère De L'éducation Nationale. *Arrêté du 1er juillet 2013 relatif au référentiel des compétences professionnelles des métiers du professorat et de l'éducation*; Ministère De L'éducation Nationale: Paris, France, 2013. Available online: https://www.legifrance.gouv.fr/download/pdf?id=UIY85sTxA33Tc7E11akWXkmtqLOiPab_gT-xvWbPuE= (accessed on 12 September 2021).

72. Kaldi, S.; Xafakos, E. Student teachers' school teaching practice: The relation amongst perceived self-competence, motivation and sources of support. *Teach. Teach. Educ.* **2017**, *67*, 246–258. [[CrossRef](#)]
73. De Vellis, R.F. Scale Development: Theory and Applications. In *Applied Social Research Methods Series*; Sage Publications: Washington, DC, USA, 1991.
74. Izadinia, M. Student teachers' and mentor teachers' perceptions and expectations of a mentoring relationship: Do they match or clash? *Prof. Dev. Educ.* **2016**, *42*, 387–402. [[CrossRef](#)]
75. Becker, E.; Goetz, T.; Morger, V.; Ranellucci, J. The importance of teachers' emotions and instructional behavior for their students' emotions—An experience sampling analysis. *Teach. Teach. Educ.* **2014**, *43*, 15–26. [[CrossRef](#)]
76. Richards, A.; Hemphill, M.; Templin, T. Personal and contextual factors related to teachers' experience with stress and burnout. *Teach. Teach.* **2018**, *24*, 768–787. [[CrossRef](#)]
77. Gaines, R.E.; Osman, D.J.; Maddocks, D.L.; Warner, J.R.; Freeman, J.L.; Schallert, D.L. Teacher's emotional experiences in professional development: Where they come from and what they can mean. *Teach. Teach. Educ.* **2019**, *77*, 53–65. [[CrossRef](#)]
78. Miles, M.; Huberman, M. Chapter 4. Early Steps in Analysis. In *Qualitative Data Analysis: An Expanded Sourcebook*; Miles, B., Huberman, A.M., Eds.; Sage Publications: London, UK, 1994; pp. 50–88.
79. Huang, S.; Yin, H.; Lv, L. Job characteristics and teacher well-being: The mediation of teacher self-monitoring and teacher self-efficacy. *Educ. Psychol.* **2019**, *39*, 313–331. [[CrossRef](#)]
80. Skaalvik, E.M.; Skaalvik, S. Job demands and job resources as predictors of teacher motivation and well-being. *Soc. Psychol. Educ.* **2018**, *21*, 1251–1275. [[CrossRef](#)]
81. Klassen, R.; Wilson, E.; Siu, A.F.Y.; Hannok, W.; Wong, M.W.; Wongsri, N.; Sonthisap, P.; Pibulchol, C.; Buranachaitavee, Y.; Jansem, A. Preservice teachers' work stress, self-efficacy, and occupational commitment in four countries. *Eur. J. Psychol. Educ.* **2013**, *28*, 1289–1309. [[CrossRef](#)]
82. Lin, H.; Gorrell, J. Exploratory Analysis of Pre-service Teacher Efficacy in Taiwan. *Teach. Teach. Educ.* **2001**, *17*, 623–635. [[CrossRef](#)]
83. Safari, I.; Davaribina, M.; Khoshnevis, I. The influence of efl teachers' self-efficacy, job satisfaction and reflective thinking on their professional development: A structural equation modeling. *J. Effic. Responsib. Educ. Sci.* **2020**, *13*, 27–40. [[CrossRef](#)]
84. Toropova, A.; Myrberg, E.; Johansson, S. Teacher job satisfaction: The importance of school working conditions and teacher characteristics. *Educ. Rev.* **2020**, *73*, 1–27. [[CrossRef](#)]
85. Poulou, M. Personal Teaching Efficacy and Its Sources: Student teachers' perceptions. *Educ. Psychol.* **2007**, *27*, 191–218. [[CrossRef](#)]
86. Newberry, M. Identified phases in the building and maintaining of positive teacher-student relationships. *Teach. Teach. Educ.* **2010**, *26*, 1695–1703. [[CrossRef](#)]
87. Han, I.; Shin, W.S.; Ko, Y. The effect of student teaching experience and teacher beliefs on pre-service teachers' self-efficacy and intention to use technology in teaching. *Teach. Teach.* **2017**, *23*, 829–842. [[CrossRef](#)]
88. Depaepe, F.; König, J. General pedagogical knowledge, self-efficacy and instructional practice: Disentangling their relationship in pre-service teacher education. *Teach. Teach. Educ.* **2018**, *69*, 177–190. [[CrossRef](#)]
89. Fackler, S.; Malmberg, L. Teachers' self-efficacy in 14 OECD countries: Teacher, student group, school and leadership effects. *Teach. Teach. Educ.* **2016**, *56*, 185–195. [[CrossRef](#)]
90. Kassis, W.; Graf, U.; Keller, R.; Ding, K.; Rohlf, C. The role of received social support and self-efficacy for the satisfaction of basic psychological needs in teacher education. *Eur. J. Teach. Educ.* **2019**, *42*, 391–409. [[CrossRef](#)]
91. Blöchliger, O.R.; Bauer, G.F. Correlates of burnout symptoms among child care teachers. A multilevel modeling approach. *Eur. Early Child. Educ. Res. J.* **2017**, *26*, 7–25. [[CrossRef](#)]
92. Gómez-Domínguez, V.; Navarro-Mateu, D.; Prado-Gascó, V.J.; Gómez-Domínguez, T. How Much Do We Care about Teacher Burnout during the Pandemic: A Bibliometric Review. *Int. J. Environ. Res. Public Health* **2022**, *19*, 7134. [[CrossRef](#)]
93. Capone, V.; Petrillo, G. Mental health in teachers: Relationships with job satisfaction, efficacy beliefs, burnout and depression. *Curr. Psychol.* **2020**, *39*, 1757–1766. [[CrossRef](#)]