Research Article

Pre-service EFL Teachers' Immunity Perceptions Concerning Their Perceived Teacher Commitment Levels

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Abstract: As a 'newcomer' to the teacher psychology literature, the term 'teacher immunity' refers to the psychological protective system of teachers. It offers a novel conceptualization of self-constructed protective mechanisms and adaptive or maladaptive immunity development of teachers or pre-service teachers. The term 'teacher commitment' refers to the extent to which teachers or pre-service teachers feel the motivation to sustain their professional attachment. However, there seems to be relatively little attention paid to these critical constructs. The present study attempts to fill this void and provide additional insights regarding the two critical psychological aspects of teachers, which are teacher immunity and teacher commitment. The participants of the study were 237 pre-service EFL teachers (PSTs). Two scales were used to collect data: the Teacher Immunity Scale (TIS) and the Organizational and Occupational Commitment Scales. The results regarding the immunity levels indicated that PSTs have a relatively moderate level of adaptive immunity, implying that they may suffer less from burnout and have a relative level of openness to change. Their commitment levels were found to be moderate, and a moderate level of correlation was observed between the sub-dimensions of teacher immunity and commitment.

Anahtar Sözcükler:

Öğretmen bağışıklığı,

yabancı dil öğretmen adayları,

mesleki adanmışlık,

öğretmen kimliği

algı

İngilizce Öğretmen Adaylarının Algılanan Öğretmen Adanmışlığı Seviyelerine göre Öğretmen Bağışıklığı Düzeyleri

Özet: Öğretmen psikolojisi alanına yeni katılan bir terim olarak, 'öğretmen bağışıklığı' kavramı öğretmenlerin psikolojik dayanıklıkları anlamına gelmektedir. Bu kavram, öğretmenlerin veya öğretmen adaylarının kendi oluşturdukları mekanizmalar ve öğretmenlerin uyum sağlayan ya da uyum sağlamayan bağışıklık geliştirme süreçleri anlamada yeni bir yaklaşım sunmaktadır. 'Öğretmen adanmışlığı' kavramı ise öğretmenlerin veya öğretmen adaylarının mesleklerine ne kadar bağlı oldukları anlamına gelmektedir. Ancak, bu iki kavram üzerine yapılan araştırmalar az görünmektedir. Bu durumda, bu çalışma bu açığı kapatmayı hedefleyip öğretmen psikolojisi bağlamında önemli olan iki kavramı bağdaştırmayı hedeflemektedir ki bu kavramlar öğretmen bağışıklığı ve öğretmen adanmışlığıdır. Bu çalışmanın katılımcıları 237 İngiliz dili öğretmen adayıdır. Veri toplamak için Öğretmen Bağışıklığı Anketi ve Örgütsel ve Mesleki Adanmışlık Anketleri kullanılmıştır. Çalışmanın sonuçları, öğretmen adaylarının orta seviyede öğretmen bağışıklığına sahip olduklarını ki bu öğretmen adaylarının tükenmişlik sendromuna yakalanma ihtimallerinin az olduğunu ve değişime açık olduklarını göstermektedir. Öğretmen adaylarının adanmışlık seviyelerinin orta seviyede olduğu gözlemlenmiştir ve öğretmen bağışıklığı ile öğretmen adanmışlığı arasında orta seviyede bir bağlantı olduğu gözlemlenmiştir.

1. Introduction

Learner-centered pedagogies focusing on learners' psychological states, behaviors, and general well-being have become an essential asset of educational research for the last fifty years (Mercer, Oberdorfer, & Saleem, 2016; Sampson, 2016). However, language teachers' psychology has received little attention in the field of ESL and EFL. As a result, examining language teacher psychology is critical not just in terms of learner accomplishment but also because teachers need to have their professional dignity honored, their opinions validated, their agency recognized, and their voices and concerns heard (Moskowitz, 2018). Language teacher psychology research is still in its early phases, with underdeveloped areas and evident gaps, which include the relationship between teachers' identity and other psychological elements, the relationship between teachers' beliefs and emotions, the interconnection of teachers' psychology, motivation and social context, teachers' autonomy, and teachers' emotions (Collie et al., 2018). Of the aforementioned gaps, a greater number of researchers have investigated other gaps in the field of teachers' psychology, such as the effects of perfectionist tendencies on the psychological well-being of English as a Second Language teachers (Mahmoodi-Shahrebabaki, 2016), the influence of culture on EFL teachers' burnout (Saboori & Pishghadam, 2016), the influence of EFL teachers' job satisfaction on their performance at work (Soodmand Afshar & & Doosti, 2016), exploring the impact of L2 instructors' optimism on their motivation and commitment (Hiver, 2016), as well as examining EFL teachers' demotivation in particular circumstances (Yaghoubinejad et al., 2016). The quantity of research on language teacher immunity is in its infancy, begging for further clarification. The current study seeks to uncover the mystery of teacher immunity while assessing its existence among Turkish pre-service EFL teachers. As it is known, few studies have been conducted to find out the correlational relationship between teacher immunity and commitment. As a result, this study aims to fill in this gap.

Since the study of language teachers' psychology is still in its earliest stages (Hiver, 2017), new notions and conceptions have emerged. Teacher immunity is one of these unique notions (Hiver & Dörnyei, 2017). Language teacher immunity is characterized as a strong armoring mechanism that develops in reaction to high-intensity threats and permits language teachers to preserve professional balance and instructional efficacy (Hiver, 2017). This immunity can adopt two global forms under stressful and unpleasant conditions: maladaptive (negative) and productive (positive). Productive immunity encourages educators with a tapestry of optimism, passion, persistent devotion, perseverance, and a never-ending motivation, while the maladaptive one offers a bleaker picture, characterized by detachment, indifference, conservatism, negativity, and a load of mental and physical exhaustion (Hiver, 2015; Hiver & Dörnyei, 2017). Indeed, the components of language teacher immunity intertwine perfectly with teachers' autonomy, involvement, and emotional states (Hiver, 2017). A lack of autonomy, a possible constraint to the domains of creativity and reflection, emerges as a barrier to the educator's development (Hiver, 2017). Additionally, teachers who embrace productive immunity manage an emotionally balancing environment (Hiver, 2016). A lack of involvement and commitment has also been noted as a language-teaching difficulty that leads to defensive instruction, a lack of willingness to improve, and maladaptive immunity (Hiver, 2017).

Commitment and involvement emerge as important elements of the instructional discourse. Teachers with passion and motivation merge perfectly with the dynamism of work. Commitment, a cornerstone in the foundation of educational development (Huberman, 1993), is a predictor of teacher effectiveness (Tsui & Cheng, 1999). Similarly, commitment

and involvement are interconnected with academic development and personal growth. The insightful observations of Riehl and Sipple (1996) confirm a favorable association between the commitment of teachers and school efficacy. As hypothesized in this study, the relationship between language teacher immunity and commitment serves as sources of pedagogical achievement. The present research aims to solve the enigma of teacher immunity while also determining its prevalence among Turkish pre-service EFL teachers. As is well known, little research has been undertaken to determine the association between teacher immunity and commitment. As a result, this research aims to fill that need.

1.1. The Concept of Teacher Immunity

Hiver and Dörnyei (2017) developed the novel idea of teacher immunity to emphasize EFL teachers' motivation and professional identity (Ordem 2017). Teacher immunity refers to how instructors develop defensive mechanisms to mitigate or avoid damage to their professional identity and motivation (Hiver, 2017). Teacher immunity is concerned with the capacities of educators to withstand, cope with, adapt to, and get over numerous interruptions in their everyday classroom activities (Hiver 2015). In simple terms, teacher immunity protects teachers against the challenges imposed on them as well as stressful events that contribute to emotional weariness and burnout (Rahmati et al., 2019).

Hiver (2017) argues that teacher immunity is a great term for researching language teachers' lives and careers. The immunity of language teachers is connected to notions like buoyancy (Martin & Marsh, 2008), coping (Somerfield & McCrae, 2000), resilience (Masten, 2001), and hardiness (Maddi, 2004). Although most of the aforementioned subjects have recently been extensively explored in the fields of teacher education and the psychology of education, there is not enough empirical data on how teachers cope with challenging and stressful situations, necessitating the involvement of researchers with an interest in language teaching and applied linguistics. Teacher resilience serves as one of the characteristics that have attracted some attention in this field (Ayoobiyan & Rashidi, 2021; Fathi & Saeedian, 2020; Parsi, 2019; Hiver, 2018). On the other hand, Hiver and Dörnyei (2017) feel that teacher immunity differs from resilience since its formation is dynamic and independent, and it is incorporated into the larger framework of professional identity. Hiver (2017) created an instrument to assess numerous features of language teacher immunity. Resilience, teaching self-efficacy, openness to change, coping, classroom affectivity, burnout, attitudes towards teaching, and teacher mental imagery were all measured on the scale. Hiver (2017) reported teacher immunity was related to teachers' emotional, psychological, and cognitive performance in L2 classes. Further studies revealed that researchers had investigated language teacher immunity in diverse samples and from various methodological approaches. As an example, Rahmati, Sadeghi, and Ghaderi (2019) investigated the rise in language teacher immunity among teachers in Iran and found that variables involving low income, inadequate confidence, student demotivation, a lack of teaching time and facilities, and parental expectations were among the main variables that stimulated and affected language teacher immunity. In addition, Ordem (2017) investigated teachers' views of adaptive abilities when dealing with challenges and discovered that instructors exhibit maladaptive behaviors with poor motivation and frequent reflection on prior experiences in L2 classrooms. As previously said, conducting a research study on language teacher immunity is currently in its early stages, and various study topics are accessible in this subject matter.

1.2. The Concept of Teacher Commitment

Commitment is the capacity to perceive oneself and what one is doing from interior as well as exterior perspectives, which leads to a feeling of responsibility for completing the assignment with authenticity (Saragih & Suhendro, 2020). Commitment also necessitates the loyalty of every individual, as well as a strong feeling of responsibility, to comprehend the organization's vision and objective. The staff that have been working in the firm for many years have a greater level of organizational commitment than those who have only been working there for a short period. The extremely dedicated staff have more positive mindsets and work longer hours than those who are not as dedicated (Slocum & Hellriegel, 2011; Don et al., 2021). Commitment is linked to habits, including arriving at work regularly, attending classes when required, and often encouraging job performance (Munian & Hasan, 2020). In a similar vein, in the setting of school, teacher commitment is an issue that academics frequently investigate. Teachers' dedication to the school underscores the notion of viewpoints, acceptance, and efforts to attain school goals. However, teachers' commitment to learners is linked to their engagement and responsibility in all learning tasks. This is in contradiction to the idea of instructors' commitment to teaching, which relates to their preparedness to deliver excellent education, their excitement, and their willingness to devote additional time to pupils. Furthermore, teachers' commitment to the profession is viewed as a motivating element, with involvement in work potentially improving their professional expertise, competence, and ability to teach (Jusoh et al., 2020; Nik Mustafa et al., 2015). As a consequence, several factors, including administration, the atmosphere, workload for teachers, their mindsets, and disciplinary behavior among pupils, impact teacher commitment (Kasa et al., 2020; Lela et al., 2020; Mustafa et al., 2019). Competent administrators in schools typically improve the engagement of teachers (Don et al., 2021). Since recent studies demonstrate that knowledgeable administrators in schools are capable of developing committed teachers (Amhag et al., 2019; Raman & Shariff, 2017), this attribute of management is an indicator. The school atmosphere, as well as school management, substantially influences teachers' commitment (Saidin et al., 2020).

Language teachers with strong commitment tend to devote themselves during instruction to their students' achievement (Jusoh et al., 2020; Nik Mustafa et al., 2015). Teacher commitment is seen as one of the elements impacting teachers' capacity to develop and integrate novel concepts into their instructional methods (Jones et al., 2014). Teachers with high commitment tend to help improve students' achievement in school (Jusoh et al., 2020). Uncommitted teachers tend to generate major problems for school management (Hallinger et al., 2014). Teachers should be aware of the fact that satisfaction and commitment may have a good influence on the school. They should take the lead in creating a favorable educational environment and atmosphere to increase the level of commitment of teachers, resulting in excellent organizational performance and job satisfaction (Jusoh et al., 2020; Munian & Hasan, 2020; Saragih & Suhendro, 2020). However, the findings of the research conducted by Gu and Day (2007) indicate that some instructors who do not grasp the value of student participation in schools do not pay close attention to the operation of the educational system as a whole, and it can operate smoothly and successfully. In actuality, most teachers regard commitment as a professional value rather than an obligation that is required for teacher effectiveness. Not only is teacher commitment directly tied to educational institutions and the performance of pupils, but it also has links related to teaching and learning issues, school achievement, and well-being (Day, 2008). Yet, along with teaching, teachers' devotion is influenced by the amount of work, which places stress on them and negatively impacts their performance. The habits of missing or being late for work

and displaying unfavorable work habits influence teachers' commitment (Munian & Hasan, 2020). As a result, the problem of teacher commitment needs to be addressed since it undermines the respectability of teaching as a profession.

Empirical evidence supports the importance of the organizational environment in fostering teacher commitment. Raza and Shah (2010) investigated the relationship between the organizational atmosphere and college teacher performance, discovering a significant positive effect. Similarly, Danish et al. (2015) discovered that the organizational atmosphere has a considerable impact on teacher dedication, which is supported by a study that included educators from 179 colleges and institutions. However, in the context of Türkiye, other investigations have examined commitment and its related dimensions, albeit with very little examination of the interplay between teacher immunity and commitment. Against this backdrop, the present study explores the levels of pre-service English as a Foreign Language (EFL) teachers' immunity and commitment, endeavoring to uncover their interwoven relational dynamics. The research questions are as follows:

1. What is the immunity level of pre-service EFL teachers?
2. What are the commitment levels of pre-service EFL teachers?
3. Is there a correlation between pre-service teachers' perceptions of teacher immunity and teacher commitment?

2. Method
2.1. Research Design

The present study is a cross-sectional descriptive study based on the survey method.

2.2. Participants

The present study was conducted with 237 pre-service EFL teachers. The number of female participants was 141 (59.49%), while the number of male participants was 96 (40.50%). The age range of the participants is between 19 – 23. The total number of first-grade PSTs is 114 (48.10% of total). The number of male PSTs is 35 (15.0%), while the number of female PSTs is 79 (33.8%). The number of second-grade PSTs is 44 (4.40 of the total). The number of male PSTs in the second grade is 13 (5.6%), while the number of female PSTs is 31 (13.2%). The number of third-grade PSTs is 24 (1.01% of the total). The number of male PSTs is 7 (3.0%), while the number of female PSTs is 17 (7.3%). Finally, the number of fourth-grade PSTs is 52 (22.03% of the total). The number of male PSTs is 18 (7.7%), while the number of female PSTs is 34 (14.5%).

2.3. Data Collection

The first data collection tool was the *Teacher Immunity Scale (TIS)* which was developed by Hiver (2017). This tool includes 39 items under seven sub-dimensions, which include: teacher self-efficacy (7 items), burnout (5 items), resilience (5 items), attitudes towards teaching (6 items), openness to change (6 items), classroom affectivity (5 items), and coping (5 items). TIS is a 6-point response scale. In the present study, the reliability indices were calculated as 0.694 for self-efficacy, 0.761 for burnout, 0.467 for resilience, 0.826 for attitudes towards teaching, 0.567 for openness to change, 0.761 for classroom affectivity, and 0.594 for coping strategies. The total reliability index was calculated as 0.795, which indicates a relatively high level of reliability. Other studies also reported a high level of reliability for the TIS (i.e., Noughabi et al., 2020; Wang et al., 2022).

The second data collection tool in the present study was the *Organizational and Occupational Commitment Scales (5-point),* which were developed by Meyer et al. (1993). The multi-dimensional commitment scales here include two broad categories, namely commitment to the occupation and commitment to the organization. Given that the present study focuses on pre-service teachers, it was not possible to use the commitment to organization dimension. Hence, we used the commitment to the occupation section, which includes three sub-dimensions, which are *affective, continuance,* and *normative commitment* to the occupation. Each dimension includes three items. The affective domain encapsulates teachers' or teacher candidates' emotional commitment to the occupation (i.e., "Being in the teaching profession is important to my self-image"). Continuance commitment concerns teachers' or teacher candidates' perseverance in the occupation (i.e., "Changing professions now would be difficult for me to do"). Finally, normative commitment is related to how responsible teachers or teacher candidates feel about their occupation (i.e., "I feel a responsibility to the teaching profession to continue in it"). In the original version, Meyer et al.'s (1993) scale includes six items for the sub-dimensions. However, due to the huge number of items in our study, we decided to use a shorter version (including three items for each dimension) which was validated by McInerney et al. (2015). We conducted a confirmatory factor analysis and found a good model fit (CFI=0.949, TLI=0.924, and RMSEA=0.075). The overall reliability of the index of the *Organizational and Occupational Commitment Scales* was 0.78, indicating a high level of reliability.

2.4. Data Analysis

In the present study, the data was collected through the online version of the scales. The data was collected in the context of the "Teaching Language Skills" course which is offered in two semesters. This course is offered to pre-service teachers during their second year of study. In the present study, we mostly depended on descriptive data analysis methods, given that our primary purpose is to lay out the overall picture in terms of pre-service teachers' immunity perceptions as well as commitment levels. Convenient and snowball sampling methods were deployed in selecting the participants.

3. Findings

The findings are presented in the form of the sub-dimensions of teacher immunity, which include self-efficacy, burnout, resilience, attitudes toward teaching, openness to change, classroom affectivity, and coping. Then, the descriptive findings regarding the commitment levels of the PSTs are presented. Finally, a correlation analysis is presented, aligning the immunity components with the sub-dimensions of the commitment levels.

Table 1.

Descriptive statistics for self-efficacy dimension

Item	N	Mean	SD	Min	Max
If I try hard, I will get through to even the most difficult or unmotivated students.	239	4.29	1.285	1	6
When all factors are considered, I will be a powerful influence on my students' success in the classroom.	239	4.74	1.011	1	6
I will have confidence in my professional ability to help students learn.	239	4.23	1.264	1	6

	N	Mean	SD	Min	Max
I have enough training and experience to deal with almost any learning problem in the classroom.	239	3.51	1.243	1	6
I am not certain that I will make a difference in the lives of my students. (R)	239	4.03	1.382	1	6
I will be able to deal effectively with the problems of my students.	239	4.64	0.985	1	6
I feel I will positively influence my students' lives through my teaching.	239	4.76	1.032	1	6

We can understand from Table 1 that PSTs believe that they will be able to touch their students' lives (M=4.76), be a powerful tool and influential figure for their students in the learning process (M=4.74), and be able to deal effectively with the problems of my students (M=4.64). PSTs also believe that they will be able to handle difficult or unmotivated students (M=4.29), and they feel confident that they will be able to cater to student learning (M=4.23). An interesting and maybe realistic finding here is that the PSTs do not believe that they have the necessary skills or expertise to deal with problematic situations in their prospective careers (M=3.51).

Table 2.

Descriptive statistics for burnout

Item	N	Mean	SD	Min	Max
At school, I will feel burned out from my work.	239	3.18	1.42	1	6
I feel that teaching will be hardening me emotionally.	239	3.10	1.28	1	6
There will be days at school when I feel vulnerable.	238	3.99	1.22	1	6
I will be emotionally drained by teaching.	239	2.83	1.44	1	6
There will be days when I feel insecure at school	239	3.29	1.39	1	6

We can see in Table 2 that PSTs in the present study do not believe that they are going to suffer from burnout (M=3.28). They do not believe that they are going to feel insecure (M=3.29), feel burnout in their school lives (M=3.18), or feel emotionally drained or burned out (M=3.10). They also do not think that they will have sensitive days at school (M=3.99). Finally, they do not think that they will have emotional breakdowns in their prospective careers (M=2.83).

Table 3.

Descriptive statistics for resilience

Item	N	Mean	SD	Min	Max
I will be able to get through difficult times because I've experienced difficulty before.	237	4.35	1.22	1	6
Failures will double my motivation to succeed as a teacher.	239	3.91	1.31	1	6
I will not have a hard time making it through stressful events.	238	3.24	1.23	1	6
I will be able to bounce back quickly after hard times.	238	4.43	1.19	1	6
It will not be hard for me to recover when something bad happens	239	4.03	1.38	1	6

Table 3 shows that the PSTs have a moderate level of resilience, with the mean score for overall resilience being 3.99. They are confident that they will be able to handle difficult situations (M=4.35). They believe that they will be able to recover from hardships (M=4.43) and do not believe that they will have problems in handling undesired events (M=4.03). In addition, they do not believe that they will have a hard time handling stressful events (M=3.24). In short, it can be said that the PSTs have a relatively satisfactory level of resilience to deal with hurdles in their prospective careers.

Table 4.

Descriptive statistics for attitudes toward teaching

Item	N	Mean	SD	Min	Max
I will enjoy working as a teacher because it pleases me.	238	4.45	1.52	1	6
Teaching will be my life, and I can't imagine giving it up.	238	3.73	1.66	1	6
Teaching will bring me very little satisfaction.	236	3.87	1.50	1	6
If I could choose an occupation today, I would not choose to be a teacher.	236	3.69	1.74	1	6
I may leave the teaching profession.	237	4.00	1.40	1	6

Table 4 presents the findings as to attitudes towards teaching. The general mean score for this dimension was found to be 3.94, indicating that the PSTs have a moderate level of attitude. They stated that they will enjoy being a teacher due to the enjoyment it will offer (M=4.45). However, at the same time, they report that they may leave the profession (M=4.00). Similarly, they do not think that teaching will bring much satisfaction to their lives (M=3.73), and it will bring them a lot of satisfaction (M=3.87).

Table 5.

Descriptive statistics for openness to change

Item	N	Mean	SD	Min	Max
As a teacher, I will prefer the familiar to the unknown	236	3.42	1.30	1	6
I won't get impatient when there are no clear answers or solutions to my problems as a teacher.	237	3.95	1.33	1	6
I will get frustrated when my work is unfamiliar and outside my comfort zone as a teacher	237	3.41	1.28	1	6
In my teaching, I will find it hard to give up on something that has worked for me in the past, even if it is no longer very successful.	235	3.69	1.27	1	6
The "tried and true" ways of teaching are the best.	235	2.86	1.08	1	6
As a teacher, I like it when things are uncertain or unpredictable	236	3.14	1.27	1	6

The descriptive results regarding the openness to change dimension are given in Table 5. The general mean score for this dimension is 3.63, indicating that the PSTs are not that open to change. The PSTs in the present study reported that they would be able to keep calm in the face of problems (M=3.95), and are not so hard on changing their tried-out methods (M=3.69). They do not think that they will make do with the familiar (M=3.42), and they do not think that they will suffer from frustration (M=3.41). What is more, the PSTs are not

afraid of breaking the hardshell (M=2.86). Overall, these findings indicate that the PSTs are willing to change.

Table 6.

Descriptive statistics for classroom affectivity

Item	N	Mean	SD	Min	Max
At school or in the classroom I will often feel upset.	237	4.34	1.45	1	6
While teaching I may regularly feel depressed.	236	4.63	1.29	1	6
I will regularly feel inspired at school or in the classroom.	237	4.31	1.24	1	6
Overall, I expect more good things to happen to me in the classroom than bad.	236	4.55	1.12	1	6
It's hard to imagine anyone getting excited about teaching.	237	3.89	1.52	1	6
In my teaching, I will always look on the bright side of things.	237	4.34	1.23	1	6

The results regarding classroom affectivity are presented in Table 6. The general mean score for classroom affectivity was 4.34, indicating a relatively moderate level of affectivity. Further results show that the PSTs think that they may suffer from depression (M=4.63). On the other hand, they expect that good things will happen to them (M=4.55) and they will feel inspiration (M=4.31). The sad news is that the PSTs do not believe that teaching is an exciting job (M=3.89). Finally, despite the hardships, the PSTs believe that they will see the bright side rather than the undesired outcomes or factors (M=4.34).

Table 7.

Descriptive statistics for coping

Item	N	Mean	SD	Min	Max
When problems arise at work, I will accept what has happened and learn to live with it.	236	4.21	1.183	1	6
When I am under a lot of stress, I may just avoid thinking or doing anything about the situation.	237	3.70	1.438	1	6
When things get stressful, I will try to come up with a strategy about what to do.	237	4.81	0.977	1	6
When I encounter a bad situation at school, I will look for something good in what is happening.	237	4.47	1.060	1	6
I don't feel that I will be able to cope with problems that come my way	237	4.47	1.184	1	6

The final element of teacher immunity consists of coping strategies (Table 7). The general mean score for the PSTs was observed as 4.33, demonstrating that the PSTs are relatively confident that they will be able to handle hurdles in their future careers. More specifically, they think that they will be able to formulate solutions for potential problems (M=4.81) and try to see something good in a negative situation (M=4.47). Interestingly, the PSTs also stated that they might have difficulty in solving potential problems (M=4.47). Moreover, they reported that they will accept the problem and try to live with it (M=4.21). Finally, the PSTs do not think that they will avoid problems (M=3.70).

Table 8.

Overall results about the sub-dimensions of teacher immunity

Variables	Disagree		Undecided		Agree	
	F	*%*	*F*	*%*	*F*	*%*
Self-efficacy	117	49.57	11	4.66	109	46.18
Burnout	108	45.76	19	8.05	110	46.61
Resilience	111	47.03	22	9.32	104	44.06
Attitudes towards teaching	113	47.88	14	5.93	111	47.03
Openness to change	96	40.67	29	12.28	112	47.45
Classroom affectivity	108	45.76	23	9.74	103	43.64
Coping	106	44.91	30	12.71	101	42.79

Table 8 indicates that the PSTs disagree with most of the sub-dimensions of teacher immunity. The number of PSTs who disagree that they will have a satisfactory level of self-confidence is 117 (49.57%), and have a satisfactory level of resilience is 111 (47.03%). Moreover, the number of PSTs who believe that they will have negative emotions or affectivity is 113 (47.88%), and who believe that they will have hard times in hurdles is 106 (44.91%). The PSTs agree with the two of the sub-dimensions. The number of PSTs who think that they will not suffer from burnout is 110 (46.61%), and those who believe that they will be open to change is 112 (47.45%).

3.1. The Commitment Levels

The second purpose of the study was to see the commitment levels of PSTs and attempt to relate them to their immunity perceptions. The findings as to the commitment levels are presented in Table 9.

Table 9.

Descriptive statistics for commitment levels

Item	N	Mean	SD	Min	Max
Affective commitment					
1. Being in the teaching profession is important to my self-image	235	3.71	0.956	1	5
2. I am proud to be in the teaching profession	235	3.83	1.074	1	5
3. I am enthusiastic about the teaching profession	235	3.57	1.108	1	5
Continuance commitment					
1. Changing professions now would be difficult for me to do	234	2.97	1.082	1	5
2. Too much of my life will be disrupted if I were to change my profession	236	2.92	1.034	1	5
3. Changing professions now would require considerable personal sacrifice	236	3.57	0.945	1	5
Normative commitment					
1. I feel a responsibility to the teaching profession to continue in it	235	3.74	1.053	1	5

2. Even if it were to my advantage, I do not feel that it would be right to leave the teaching profession now.	234	2.94	1.032	1	5
3. I am in the teaching profession because of a sense of loyalty to it.	236	3.19	1.124	1	5

We can understand from Table 9 that the affective, continuance, and normative commitment levels of the PSTs are relatively low, with means scores of 3.71, 3.15, and 3.29, respectively. In terms of affective commitment, it can be seen that the PSTs do not think that being in the teaching profession is significant for their self-image (M=3.71) and that they are proud that they will be in the teaching profession (M=3.83). What is more, they do not seem to be highly enthusiastic about the teaching profession (M=3.57). In terms of the continuance dimension, the PSTs reported that changing the teaching profession would not be difficult for them (M=2.97), and that changing the teaching profession would not cause much trouble for them (M=3.57). Regarding normative commitment, they reported that they moderately feel responsible for the teaching profession (M=3.74), that they have no concerns about leaving the profession (M=2.94), and finally, they do not feel much loyalty to the profession for the moment (M=3.19).

3.2. Correlation analysis

The results of the correlation analysis are presented in Table 10. The findings indicate that there is strong positive correlation between self-efficacy and resilience (r = .65, p < .01), self-efficacy and attitude (r = .50, p < .01), self-efficacy and classroom affectivity (r = .58, p < .01), and self-efficacy and coping (r = .54, p < .01). Relatively moderate levels of correlation were observed between self-efficacy and affective commitment (r = .22, p < .01) and self-efficacy and continuance commitment (r = .31, p < .01). Strong negative correlation was observed between burnout and attitudes (r = .57, p < .01), burnout and classroom affectivity (r = .61, p < .01). A relatively lower level of negative correlation was observed between burnout and affective commitment (r = -.23 , p < .01) and burnout and normative commitment (r = -.20, p < .01). The resilience dimension strongly correlated with classroom affectivity (r = .47, p < .01) and coping (r = .52, p < .01). A lower level of correlation was also observed between resilience and affective commitment (r = .23, p < .01) and continuance commitment (r = .36, p < .01). The attitudes to teaching dimension of teacher immunity highly correlated with classroom affectivity (r = .69, p < .01), and coping (r = .41, p < .01). Finally, classroom affectivity dimension highly correlated with the coping dimension (r = .54, p < .01).

Table 10.

The correlation between the components of teacher immunity and teacher commitment

	SE	Burn	Resi	Atti.	Open	CA	Cop.	Affect	Cont.	Norm.
SE										
Burn	-0.380									
Resi	0.659	-0.320								
Atti	0.506	-0.567	0.382							
Open	0.257	-0.182	0.321	0.267						
CA	0.584	-0.612	0.470	0.691	0.181					
Cop.	0.543	-0.38	0.529	0.411	0.254	0.540				
Affect	0.224	-0.235	0.239	0.117	0.119	0.077	-0.004			
Cont.	0.318	-0.191	0.360	0.099	0.201	-0.004	-0.024	0.159		

Norm.	0.117	-0.206	0.113	0.126	0.120	0.154	0.036	0.672	0.214

Notes: SE=Self-efficacy, Burn=burnout, Resi=Resilience, Atti=Attitude, Open=Openness to change, CA=Classroom affectivity, Cop.=Coping, Affect=Affective commitment, Cont.=Continuance commitment, Norm.=Normative commitment

4. Discussion and Conclusion

The present study set out to examine two psychological and partially personal constructs in terms of teacher psychology, namely teacher immunity and teacher commitment, among PSTs. The fundamental aim was to see whether the two constructs are relatable. Teacher immunity, as was put forward by Hiver (2017), consists of seven sub-dimensions, which range from self-efficacy, burnout, resilience, attitudes towards teaching, openness to change, classroom affectivity, and coping.

Concerning the *self-efficacy dimension*, the findings indicated that the PSTs have a relatively moderate level of self-efficacy. Mostly, they reported that they would be able to make changes in their prospective students' lives and would be influential figures in their future careers. Regarding the *burnout dimension*, the PSTs reported that they would not suffer from burnout. They reported that the feelings of insecurity or emotional drainage would not be so harsh with them. Emotional breakdowns are also low in their agenda. In terms of the *resilience dimension*, the PSTs reported a moderate level of resilience, indicating that they are moderately confident that they will be able to grapple with stress-causing incidences and will be able to 'bounce back' in the face of devastating events. Regarding the attitudes towards the teaching dimension, the study found that the affective side of learning might occupy a moderate level of engagement on the part of PSTs, demonstrating that they do not expect a high level of motivation or satisfaction in their jobs. This could be attributed to a low level of appreciation towards the teaching profession experienced in the Turkish context over the past years. The second reason that could be cited regarding low satisfaction expectations is the declining economic advantages the profession offers. As is known, economic benefits are significant determiners of professional motivation or satisfaction. Regarding the *openness to change dimension*, the study found that the PSTs are not that open to change, indicating that they are more likely to opt for the beaten track. As for the next dimension of teacher immunity, which is *classroom affectivity*, the study found that PSTs may experience emotions rather intensely, indicating that they may suffer from depression or that teaching may not always be an exciting activity. Finally, regarding the final component of teacher immunity, which is coping, the results indicated that PSTs believe that they can handle hardships in the teaching and learning process. In particular, they reported that they will be able to formulate solutions for problems.

The picture presented here shows that the PSTs have a relatively moderate level of adaptive immunity. The components where they rated higher include *burnout*, which shows that they are less likely to suffer from burnout. They are also open to change. However, they have a less clear picture in terms of the other dimensions which include *self-efficacy, resilience, attitudes towards teaching, classroom affectivity,* or *coping.* As can be understood, PSTs may not manage to handle these factors by themselves. Teacher education programs should focus more on equipping PSTs with the required skills and knowledge to handle hardships and earn them more positive attitudes toward teaching. A similar picture was reported by Songhori and Ghonsooly (2018), who found that teachers mostly have maladaptive immunity among Iranian teachers.

The next objective of the present study was to measure PSTs' commitment levels and relate them to their teacher immunity perceptions. To begin with, the PSTs in the present study did not draw a rosy picture in terms of their commitment in all three dimensions: affective commitment, continuance commitment, and normative commitment. The lowest level of commitment was the continuance commitment, which demonstrates that PSTs may not persevere in the profession, followed by normative commitment and affective commitment. The low level of commitment could be attributed to declining appreciation towards the teaching profession in Türkiye. Add this to the economic challenges that teachers are experiencing nowadays. Related to this, Başaran and Dedeoğlu-Orhun (2013) reported that PSTs sustained lower levels of motivation due to a lack of appreciation in society.

As for the correlation between the dimensions of teacher immunity and teacher commitment, to begin with, a strong correlation was observed between the sub-dimensions of teacher immunity. In particular, a strong positive correlation was observed between self-efficacy, resilience, attitudes, and classroom affectivity. Similarly, Beltman et al. (2011) reported the connection between self-efficacy, confidence and coping strategies, and resilience. Personal beliefs of accomplishment are critical for a variety of factors. Affective commitment was also found to be correlated with self-efficacy. Hence, care must be taken to increase PST self-efficacy beliefs. One significant method here would be to provide constructive feedback to PSTs. In addition, affective commitment was also found to be negatively correlated with burnout levels. These findings indicate that the emotional aspects of the learning and teaching process occupy a critical space in the psychological lives of PSTs. A moderate level of correlation was also seen between burnout and normative commitment. This means that in cases where PSTs are well in command of their responsibilities, they are less likely to suffer from burnout. Furthermore, the resilience dimension is highly correlated with the classroom affectivity dimension and commitment components. The relationship between teacher resilience and commitment was voiced in the literature (Gu & Day, 2007). This finding also gives support to the assumption that emotional aspects are critical in the occupational image of PSTs.

All the efforts notwithstanding, the present study includes several limitations. First, it included only quantitative data; hence, it was not possible to obtain an in-depth picture of what hinders PSTs immunity perceptions or their projections on their future careers. Future studies could include qualitative data to circumvent this consideration. Second, the present study does not show a strong connection between immunity perceptions and commitment levels. Further qualitative research could investigate why commitment levels are not translated into immunity perceptions. Third, the present study includes self-report cross-sectional data. Hence, future studies could consider including more qualitative data in longitudinal designs.

Overall, the present study contributed to our understanding of a significant psychological component, namely teacher immunity, a concept that has yet to be thoroughly investigated in teacher psychology research concerning another vital aspect: teacher commitment. Even though our study did not develop a strong correlation between the sub-dimensions of both constructs, the results still show that working on these constructs is critical to understanding PSTs' perceptions so that action can be taken to improve PSTs in that regard.

Several implications could be drawn depending on the findings of the study. First, the study found that the PSTs feel short of collegiate communication. Teacher education programs should foster interaction between or among PSTs by emphasizing collective reflection.

Second, some PSTs stated that they would avoid challenges. In that regard, PSTs could be equipped with the required skills to handle hardships through case-based teacher education, where teachers could be presented with real-life like cases and required to solve them. Finally, the commitment levels of the PSTs were found to be relatively low; hence, more should be done to give more commitment to PSTs.

Note on Ethical Issues

Ethical permission for this study was attained from Karabük University's Ethical Committee on 27/09/2023 with the decision number: E-78977401-050.01.04-277401

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