



Unveiling Language Teacher Productive Immunity: A Lenz into the Impacts on Professional Identity, Teacher Anger, Grit Tendencies, and Psychological Well-Being

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Abstract

Teachers, as the center of the class, can make positive changes in their students' lives; they should be equipped with skills that will allow them to do their jobs effectively. The inclusion of productive immunity (i.e., the procedures that instructors go through to devise protective mechanisms against the effects of undesirable disruptions that might potentially endanger their desire to instruct) as one of these skills gives educators the capability to analyze and immunize their own performance. In light of this significance, it is of the utmost importance to reveal teacher productive immunity and its correlates, particularly in EFL (English as a foreign language) contexts. Regardless, there is a dearth of studies on the possible interplay among teacher immunity, professional identity, anger, grit tendencies, and psychological well-being in Iranian EFL settings. Therefore, the present study aimed to ascertain whether there was a statistically significant connection between the professional identity, anger, grit tendencies, and psychological well-being of Iranian EFL instructors and their immunity. A total number of 394 EFL teachers teaching at public schools (Khorasan Razavi and Khuzestan, Iran) took part in this analysis. The Language Teacher Immunity Instrument (LTII), The Teacher's Professional Identity Scale (TPIS), the L2-teacher Grit Scale (L2TGS), The Teacher Anger Scale (TAS), and The Psychological Well-Being at Work (PWBW) were administered electronically to respondents. The predictive power of teacher immunity was found in data analysis via Confirmatory Factor Analysis (CFA) and Structural Equation Modelling (SEM). The findings stress the need of including reflective practices, emotional control strategies, and immune system strengthening in teacher preparation programs.

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Introduction

Teachers lay the groundwork for what the future of learning will look like. They establish norms, provide safe spaces, encourage growth, monitor for symptoms of distress, model positive behavior, and promote student learning. Therefore, society relies on having instructors who are themselves well-educated, devoted, engaged, immunized, and accountable and who can inspire their pupils to think critically and creatively. Crucial to the topic, such a high-stakes profession riddled with possible vagaries merits additional scrutiny from all angles.

Hiver and Dörnyei (2017) voiced that teacher immunity (TI) is essential in developing language instructors as professionals. TI to the intense turbulence and intricacies of the classroom is described as a protective mechanism. This cutting-edge idea has positive and negative aspects (Hiver, 2017). Teachers' productive immunity helps them feel better and acts as a shield against the negative effects of stress, disappointment, and exhaustion. Rahmati et al. (2019) noted that instructors of foreign languages may not have a long career without some immunity. That is to say, immunity enables effective teaching, allows teacher reflection, and shields language instructors from various restrictions in the language teaching setting.

Teacher professional identity (TPI) is a complex, context-specific, and non-linear phenomenon (Yuan & Zhang, 2020). Because of its diversity, instability, and social nature, teacher identity is still a nebulous concept in education. It may be shaped and reshaped by the passage of time and by the interactions within diverse professional contexts and communities of practice. According to Beauchamp and Thomas (2009), every person has a malleable, not fixed identity resulting from a dynamic interplay between their private, public, and discursive selves. A tight relationship between TPI and teacher L2 grit was inferred by Namaziandoust et al. (2022b). Teacher L2 grit (TL2G) is a personality attribute that develops through effort, persistence, and dedication to learning over the long term (Sudina et al., 2021). It is currently unclear how TL2G relates to other teacher-related constructs, especially in the EFL context, and this area of study is ripe for additional exploration.

Teachers may feel a wide range of emotions throughout their profession. The most unpleasant feeling one may feel is anger. In the reciprocal model of the origins and consequences of teachers' emotions proposed by Frenzel et al. (2021), teacher anger (TA) is sparked by both external circumstances that they see as preventing them from achieving their objectives and internal evaluations of their own role in bringing about these external constraints. There are various problems that instructors confront in the classroom, each of which has the potential to evoke teacher anger, according to Burić and Frenzel (2019). There is a lot of mystery around several aspects of teacher anger and their correlations, which is why additional study is needed.

Another significant driver of teachers' efficiency that leads to the success of their students is the instructors' level of psychological well-being. This is because the caliber of their instructors primarily impacts students. In recent years, researchers have focused more on teachers' well-being as a supporting teacher attribute that may reduce teachers' work stress and anger (Fabelico & Afalla, 2020; Harding et al., 2019). Teacher psychological well-being

(TPW-B) pertains to an ability to handle stress, have good mental health, have meaning in life, and feel satisfied with one's life. Well-being is associated with improved academic performance and a more favorable emotional state for both students and instructors (Xiyun et al., 2022).

Reviewing the relevant literature, it becomes clear that researchers have not paid enough attention to the links between TI, TPI, TA, TL2G, and TPW-B, especially in the EFL context (Deng et al., 2022; Seligman, 2018; Namaziandoust et al. 2022a). Therefore, additional studies are needed to provide an abundant understanding of how language teachers productive immunity, TPI, TA, TL2G, and TPW-B due to the scarcity of research in this area.

Literature Review

The first construct elucidated in the current study is immunity. The metaphor of immunity, which has only recently been brought into L2 education, derives from the Latin term *immunes* (Hiver & Dörnyei, 2017). It refers to the protective mechanism that fights against the harmful, undesired, or pernicious effects that come from the outside environment (Hiver, 2015). Janeway et al. (2005) define immunity as a defense mechanism that boosts natural antibody production and dampens infection via biochemical activities. Moreover, Hiver (2017) stressed the importance of identity, thinking, and social behavior in teacher immunity development and operation. Language teachers may show productive (good) or maladaptive (bad) immunity to adversity, much like biology. Productive immunity leads to optimism, devotion, enthusiasm, adaptation, and inspiration, whereas maladaptive immunity leads to boredom, skepticism, cynicism, or hostility to change. In simpler words, productive immunity protects educators against stress, disappointment, and tiredness (Hiver, 2017). On the other hand, maladaptive immunity is responsible for fossilizing educational processes (Zheng et al., 2022).

A review of the research on TI suggests that self-organization theory, a branch of complexity theory, inspired the creation of this novel concept (Larsen-Freeman, 2012). As defined by Gooran et al. (2022), self-organization is the process by which an evolving technique's overall operation changes due to interactions among its components. TI is a relatively unexplored topic, and more research is needed to understand better its connections to other aspects of teachers' work. In this line of inquiry, Haseli Songhori et al. (2018) found that Iranian English teachers commonly utilized maladaptive immunity. They concluded that contact, realignment, and balance caused Iranian English teachers' immunity. Similarly, Rahimpour et al. (2020) used path analysis to model language teacher immunity factors. Their study reveals that job insecurity and attentive teaching affect language instructors' attractiveness, extroversion, and emotion. They also found that language instructors with job insecurity showed far lower educational reflection and immunity. Additionally, Li et al. (2022) also revealed that EFL teachers' emotional management and critical thinking influence productive immunity.

Language TPI, grounded on the idea of development, is the second topic explored in the current research. According to identity development Theory proposed by James Marcia (1993), an individual's identity is the product of a sequence of decisions made by that individual, most often during adolescence. He argued that both conflict and commitment have a role in determining the beliefs, vocations, relationships, interests, and genders a person chooses to include in their identity. A person may make these choices at any point in their life. An

individual's sense of identity is tied to their sense of self and the degree to which they can regulate their behavior concerning who they are and their roles within a given social and cultural setting (Beauchamp & Thomas, 2011).

Identity is the distinct collection of traits correlated with a particular person compared to the impressions and characteristics of other people (Sheybani & Miri, 2019). It is a continually growing personal and communal trait that is (re)constructed by a network of causes and processes within and outside persons (Salehizadeh et al., 2022). In contact with individuals from the same culture or discourse, people embrace, maintain, minimize, and argue portions of their identities, behavior, and cognition (Teng, 2019). Because of this, one person might have many identities with family, career, society, policymakers, and religion (Liu et al., 2021). As Taylor (2017) highlighted, the language teacher's identity plays a fundamental role in driving the cyclical building and restoration of expertise and proficiency on the part of the teacher. Language TI is a vital component in instructors adapting to the constantly changing and growing contexts of language instruction (Xiang, 2021; Yuan & Zhang, 2020).

The other teacher-related concept is TA. Generally, Frenzel et al. (2021) argue that all educators' effectiveness beliefs, pedagogical adoptions, self-esteem, and well-being are affected by emotional experiences. More specifically, Burić and Frenzel (2019) describe TA in the classroom as a complex structure, similar to other human emotions. It includes personal, mental, inspiring, flexible, and biological emotions. Multiple educational institutions of thought approach the topic of anger from various vantage points. Behavioral perspectives regarded anger as a response to the blockage of a goal (Thomas, 1990). Based on the reciprocal model of teacher emotions, Moè and Katz (2021) argued that instructors become angry when they perceive situations and events that impede their goals and are held accountable for them. Burić and Frenzel (2019) examined the relationship between furious instructors, emotional labor, general well-being, and work confidence. According to the findings, surface behaving positively correlated with all facets of a teacher's rage, but deep acting did not. By the same token, Deng et al. (2022) came to a similar conclusion that effective regulatory methods can stifle TA.

Grit, the fourth psychological notion, characterized by a willingness to keep at something despite setbacks, is the cornerstone of grit theory by Duckworth et al. (2007). As a further attempt, Duckworth (2016) proposed the Grit hypothesis, which argued that a person's propensity to succeed was directly related to their level of interest in and commitment to the task at hand. Teachers with grit keep at work despite setbacks and remain passionate about their work (Dale et al., 2018; Pawlak et al., 2022). While there has been a plethora of research on the topic of perseverance in language learners in recent years (e.g., Sudina et al., 2021; Wei et al., 2020; Zheng et al., 2022), little has been done to examine L2 perseverance among instructors or the factors that contribute to it. As pointed out by Teimouri et al. (2020), this deficiency may be traced back to the absence of SLA-specific measures for measuring perseverance. This thought prompted Sudina et al. (2021) to develop the notion of L2 grit among educators of foreign languages.

Teachers with grit in learning a second language continue to study and work toward their goals despite setbacks. Liu (2022) and Xu (2022) found that grittier language teachers are more

determined and love teaching. Similarly, Baierschmidt (2022) and Cormier et al. (2019) noted that grit strongly predicts foreign language competency in university students. Furthermore, Shabani et al. (2022) examined how EFL instructors' grit affects their instructional ideas. The different subscales of educational thinking indicated substantial differences between low- and high-grit instructors. Zheng et al. (2022) also noted the importance of emotion management and self-efficacy in higher education TL2G.

The last variable chosen for analysis in this study is TPW-B, which pertains to overall contentment, domain-specific well-being, and solid professional emotions (Collie, 2022). It has been established that a TPW-B substantially influences how teachers connect with their learners (Diener et al., 2017). Teachers with greater well-being are more engaged and empathetic with students, whereas those with more emotional exhaustion are more critical (Mercer & Gregersen, 2020). It means that psychological well-being—including mental and physical health, life happiness, and work satisfaction—provides a more lasting sense of purpose, according to Mercer (2021). For analyzing educator TPW-B, Self-determination theory (SDT) offers a valuable and well-supported theoretical framework. Furthermore, SDT gives a solid basis for thinking about how teachers' happiness and motivation are connected to their dedication to their profession and school (Deci & Ryan, 2002, 2008).

It should be highlighted that TPW-B affects teacher performance, student growth, and academic accomplishment, making it more critical to understand teacher well-being in educational contexts. Corcoran and O'Flaherty (2022) suggested techniques to help instructors manage job-related stress and sustain positive teaching evaluations. Nevertheless, educators who often grapple with adverse emotions in their professional environment may experience emotional exhaustion or a lack of involvement in the educational setting, perhaps perpetuating the ongoing cycle. Therefore, the investigation of teacher well-being has significant importance for both students and educators, with potential benefits extending to the entire academic community. To shed light on these issues and spur more investigation, the current research sought to create a model based on the existing theories and literature to illuminate the connections between TI, TPI, TA, TL2G, and TPW-B (see Figure 1). The findings may help teachers and researchers get insight into how they may advocate for establishing more meaningful and effective pedagogical practices. This was accomplished by focusing on the following research questions:

- RQ1) Can the EFL instructors' TI shed light on their TPI?
- RQ2) Can the EFL instructors' TI shed light on their TA?
- RQ3) Can the EFL instructors' TI shed light on their TG?
- RQ4) Can the EFL instructors' TI shed light on their TPW-B?

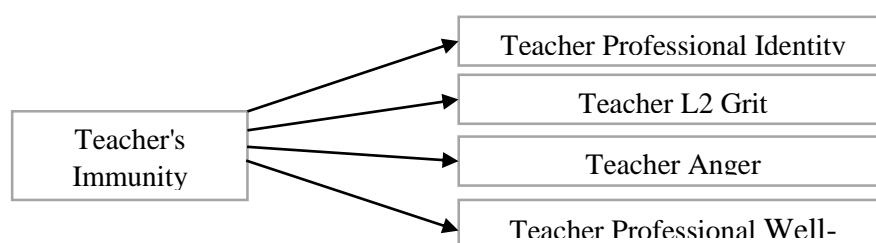


Figure 1. *The Suggested Model*

Methodology

Participants and Settings

This study incorporated 394 EFL teachers, 169 males and 225 females. The teachers were stationed at various public schools in two provinces of Iran (i.e., Khorasan Razavi and Khuzestan), where they taught English to students. Participants ranged in age from 24 to 52, and their teaching experience was anything from one year to twenty-nine. There were 126 graduates in the field of TEFL, 85 in translation studies, 52 in English literature, and 131 in the field of linguistics. There were 82 teachers with doctoral degrees or candidates in these fields, 169 with master's degrees, and the remainder with bachelor's degrees.

Instruments

The participants' immunity was evaluated using the Language Teacher Immunity Instrument (LTII) developed and verified by Hiver (2017). There are 39 items spread over seven scales, with a Likert scale ranging from 1 (strongly disagree) to 6 (strongly agree). This instrument has the following ranges: Self-Efficacy in the Classroom (7 items), Burnout (5 items), Resilience (5 items), Attitudes (5 items), Openness to Change (6 items), Affectivity in the Classroom (6 items), and Coping (5 things). Cronbach's alpha estimated good reliability for the LTII in this study, with values between 0.847 and 0.911.

The Teacher's Professional Identity Scale (TPIS) was devised by Kao and Lin (2015) to assess TPI. It comprises 22 questions in a Likert scale spanning from 1 (Strongly Disagree) to 5 (Strongly Agree). TPIS is divided into a total of six distinct subscales, which are as follows: self-expectation, teachers' duties, external influential factors, pedagogy, instructional skills and knowledge, and teachers' citizenship behavior. In this study, it was established that the reliability of this instrument ranged from 0.855 to 0.903.

The Teacher Anger Scale (TAS), created and verified by Burić and Frenzel (2019), was used to evaluate teachers' anger levels. It has 16 questions on a Likert scale ranging from 1 (never) to 5 (always), and it looks at four different aspects of a teacher's anger: (1) anger toward students, (2) anger against parents, (3) anger toward colleagues, and 4) anger at the system. The dependability indices in the current investigation were satisfactory, with values ranging from 0.820 to 0.881.

The L2-teacher grit scale (L2TGS), developed and verified by Sudina et al. (2021), was used to inspect the L2 grit produced by teachers. This instrument includes 14 items, each rated on a 5-point Likert scale, with two subscales: perseverance in teaching and passion and purpose in education. This measure was created specifically to assess the perseverance of EFL/ESL instructors. The value of 0.921 reported for Cronbach's alpha for the L2TGS suggested that the dependability was satisfactory.

The Psychological Well-Being at Work (PWBW by Dagenais-Desmarais & Savoie, 2012) was used in this investigation to determine the level of psychological well-being shown by educators. This questionnaire comprises five underlying facets, all of which reported high-reliability coefficients (varying from 0.824 to 0.877): Interpersonal Fit at Work, Thriving at Work, Feeling of Competence at Work, Perceived Recognition at Work, and Desire for Involvement at Work. The scale consists of 25 statements, each scored on a 6-point scale,

ranging from 0 (total disagreement) to 5 (complete agreement), with 0 representing no agreement at all.

The Procedures of Data Collection and Data Analysis

This investigation began in August of 2022 and lasted until November of the same year. The process was implemented utilizing an internet-based, web-based technology. It was a requirement that the participants use Online Questionnaires to fill out the survey. Parts of the questionnaire included the LTII, TPIS, TAS, L2TGS, and PWBW. Because of how the online survey was structured, there had to be tight connections between all of the survey's moving parts. This was done to guarantee that no information would be lost due to the survey's layout. Therefore, a vital connection is required between all of the parts. There was a 71.28 percent return rate, with 394 forms sent back completely filled out. The Kolmogorov-Smirnov test was performed to determine whether the data were normally distributed. Since the data followed a normal distribution, it could be analyzed using CFA and SEM in LISREL 8.80.

Results

The output of the statistical program is presented here. To begin, The Kolmogorov-Smirnov test was run to determine the best approach to statistical analysis.

Table 1. *The Results of Kolmogorov-Smirnov Test*

	Kolmogorov-Smirnov Z	Asymp. Sig. (2-tailed)
Teaching Self-efficacy	0.928	0.355
Burnout	1.320	0.061
Resilience	0.943	0.336
Attitudes toward Teaching	1.143	0.146
Openness to Change	0.994	0.277
Classroom Affectivity	1.228	0.098
Coping	1.330	0.058
TI	1.143	0.147
Self-expectation	0.677	0.750
Teachers' Duties	0.955	0.321
External Influential Factors	0.770	0.594
Pedagogy	0.909	0.380
Instructional Skills and Knowledge	0.998	0.273
Teachers' Citizenship Behavior	0.836	0.487
TPI	0.804	0.537
Students-related	0.760	0.610
Parents-related	0.989	0.282
Colleagues-related	1.156	0.138
System-related	0.935	0.346
TA	0.550	0.923
Perseverance in Teaching	1.171	0.129
Passion and Purpose in Teaching	1.118	0.203
TG	0.957	0.319
Interpersonal Fit at Work	1.132	0.218
Thriving at Work	0.956	0.320
The feeling of Competency at Work	1.307	0.065
Perceived Recognition at Work	1.302	0.067
Desire for Involvement at Work	1.010	0.221
TPW-B	0.862	0.447

All instruments and subscales had sig values higher than 0.05, as shown in Table 2. Considering the data follows a normal distribution, parametric approaches may be used. The LTII, TPIS, TAS, L2TGS, and PWBW were studied for their structural relationships utilizing LISREL 8.80, CAF, and SEM. In addition to computing the chi-square value, the Root Mean Squared Error of Approximation (RMSEA), the normed fit index (NFI), the good fit index (GFI), and the comparative fit index (CFI) were calculated to assess the level of agreement between the data and the model. Chi-square should not have statistical significance if the chi-square/df ratio is less than 3 (Jöreskog, 1990). The RMSEA less than 0.1 is recommended by Jöreskog (1990). The NFI, GFI, and CFI measures must also be more than 0.90.

Table 2. Model Fit Indices

Fitting indexes	χ^2	df	χ^2/df	RMSEA	GFI	NFI	CFI
Cut value			<3	<0.1	>0.9	>0.9	>0.9
Model 1	729.24	248	2.940	0.070	0.931	0.925	0.953
Model 2	4266.60	1435	2.973	0.071	0.937	0.941	0.956

Table 2 outlines the results, showing that all of the fit metrics were within acceptable ranges: chi-square/df (2.940), the RMSEA (0.070), GFI (0.931), NFI (0.925), and CFI (0.953).

The fit indices for the second model are also included in Table 6. The RMSEA (0.071) and chi-square ratios (2.973) indicate an appropriate fit. Likewise, the CFI (0.956), NFI (0.941), and GFI (0.937) all fell within acceptable ranges.

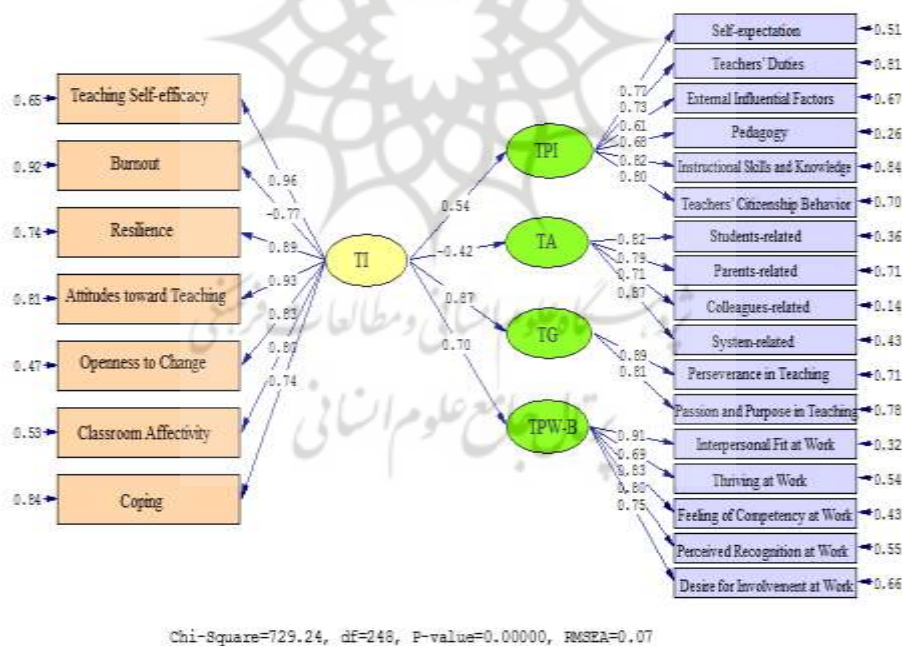


Figure 2. Schematic Depiction of Path Coefficient Values (Model 1)

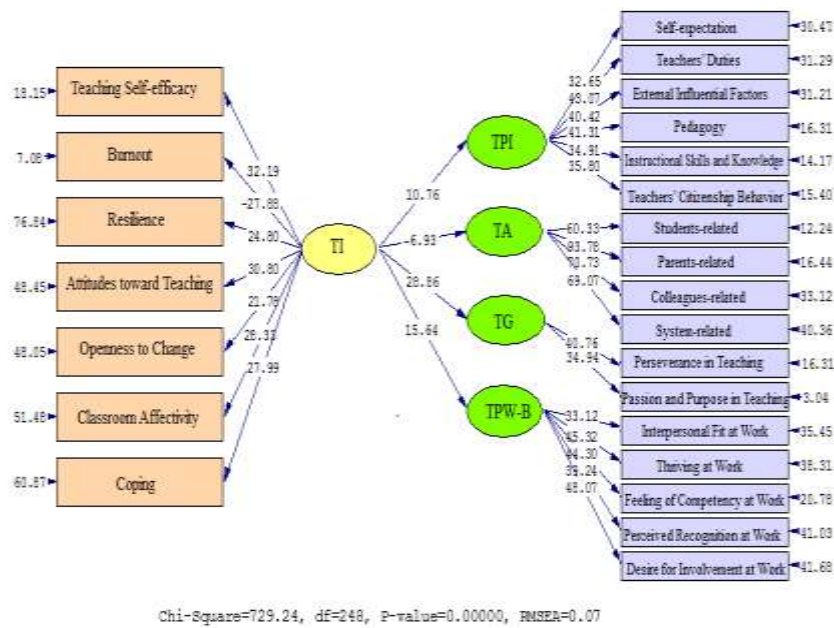


Figure 3. T Values for Path Coefficient Significance (Model 1)

The substantial relationship between TI, TPI, TA, TG, and TPW-B is evident in Figures 2 and 3. TI exhibited substantial relationships with TPI ($\beta=0.54$, $t=10.76$), TA ($\beta=-0.42$, $t=-6.93$), TG ($\beta=0.87$, $t=28.86$), and TPW-B ($\beta=0.70$, $t=15.64$).

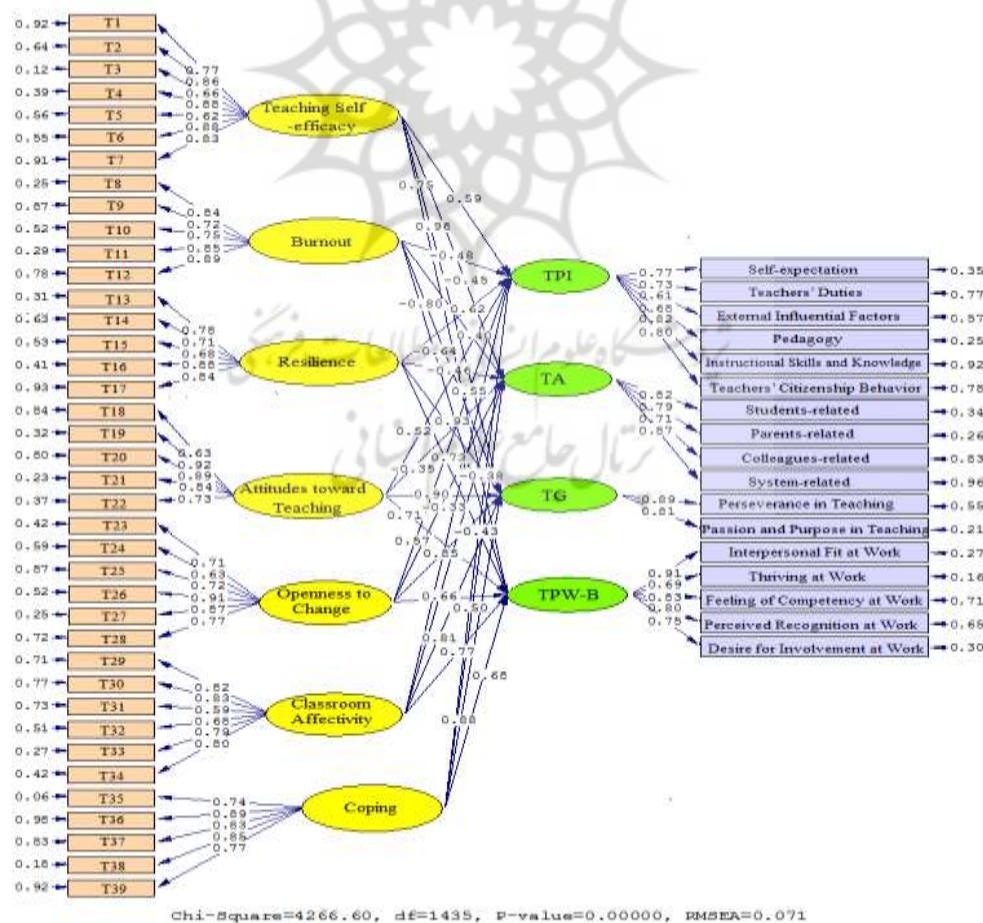


Figure 4. Schematic Depiction of Path Coefficient Values (Model 2)

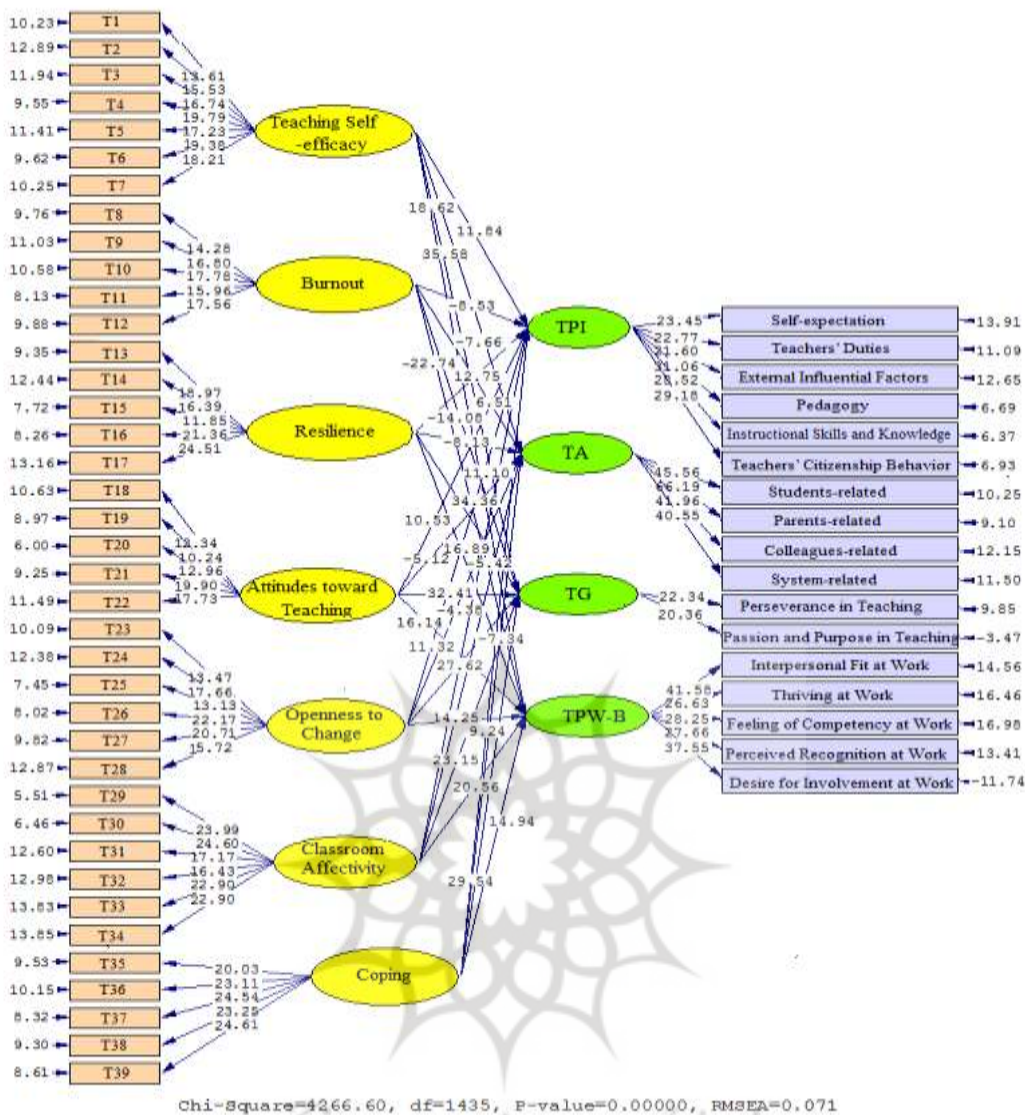


Figure 5. T Values for Path Coefficient Significance (Model 2)

Model 2 is shown in Figures 4 and 5, which visually represent the path coefficient values for the relationship between the TPI, TA, TG, TPW-B, and TI subfactors. These diagrams explain how the model works. The results are as follows when looking at the TPI and TI subfactors separately: Teaching Self-efficacy ($\beta=0.59$, $t=11.84$), Burnout ($\beta=-0.48$, $t=-8.53$), Resilience ($\beta=0.62$, $t=12.75$), Attitudes toward Teaching ($\beta=0.52$, $t=10.53$), Openness to Change ($\beta=0.57$, $t=11.32$), Classroom Affectivity ($\beta=-0.45$, $t=-7.66$), and Coping ($\beta=0.40$, $t=6.51$). Teaching Self-efficacy ($\beta=-0.45$, $t=-7.66$), Burnout ($\beta=0.40$, $t=6.51$), Resilience ($\beta=-0.46$, $t=-8.13$), Attitudes toward Teaching ($\beta=-0.35$, $t=-5.12$), Openness to Change ($\beta=-0.33$, $t=-4.38$), Classroom Affectivity ($\beta=-0.38$, $t=-5.42$), and Coping ($\beta=-0.43$, $t=-7.34$) were also shown to be linked with TA. The same result holds true for the Teaching Self-efficacy ($\beta=0.96$, $t=35.58$), Burnout ($\beta=-0.80$, $t=-22.74$), Resilience ($\beta=0.93$, $t=34.36$), Attitudes toward Teaching ($\beta=0.90$, $t=32.41$), Openness to Change ($\beta=0.85$, $t=27.62$), Classroom Affectivity ($\beta=0.81$, $t=23.15$), and Coping ($\beta=0.88$, $t=29.54$). Examining the relationships between TPW-B and TI components led to the subsequent outcome: the Teaching Self-efficacy ($\beta=0.75$,

$t=18.62$), Burnout ($\beta=-0.64$, $t=-14.08$), Resilience ($\beta=0.73$, $t=16.89$), Attitudes toward Teaching ($\beta=0.71$, $t=16.14$), Openness to Change ($\beta=0.66$, $t=14.25$), Classroom Affectivity ($\beta=0.77$, $t=20.56$), and Coping ($\beta=0.68$, $t=14.93$).

A Pearson product-moment correlation was used in the following stage to investigate the relationship between TPI, TA, TG, TPW-B, and TI subfactors.

Table 3. *The Correlation Coefficients between the TPI, TA, TG, TPW-B, and TI subfactors*

	Teaching Self-efficacy	Burnout	Resilience	Attitudes toward Teaching	Openness to Change	Classroom Affectivity	Coping	TPI	TA	TG	TPW-B
Teaching Self-efficacy	1.000										
Burnout	-0.589**	1.000									
Resilience	0.642**	-0.608**	1.000								
Attitudes toward Teaching	0.521**	-0.532**	0.622**	1.000							
Openness to Change	0.503**	-0.441**	0.534**	0.612**	1.000						
Classroom Affectivity	0.489**	-0.455**	0.532**	0.524**	0.609**	1.000					
Coping	0.598**	-0.616**	0.634**	0.472**	0.554**	0.435*	1.000				
TPI	0.623**	-0.503**	0.645**	0.553**	0.592**	0.581**	0.532**	1.000			
TA	-0.489**	0.433**	-0.493**	-0.384**	-0.362**	-0.405**	-0.466**	-0.553**	1.000		
TG	0.972**	-0.843**	0.951**	0.921**	0.882**	0.847**	0.903**	0.674**	-0.643**	1.000	
TPW-B	0.781**	-0.665**	0.762**	0.734**	0.683**	0.791**	0.708**	0.531**	-0.685**	0.711**	1.000

**Correlation is significant at the 0.01 level (2-tailed)

As displayed in Table 3, TPI, TA, TG, and TPW-B were substantially and positively linked with TI subfactors: TPI and Teaching Self-efficacy ($r=0.623$), Burnout ($r=-0.503$), Resilience ($r=0.645$), Attitudes toward Teaching ($r=0.553$), Openness to Change ($r=0.592$), Classroom Affectivity ($r=0.581$), and Coping ($r=0.532$). There were significant negative correlations between TA and TI subfactors: Teaching Self-efficacy ($r=-0.489$), Burnout ($r=0.433$), Resilience ($r=-0.493$), Attitudes toward Teaching ($r=-0.384$), Openness to Change ($r=-0.362$), Classroom Affectivity ($r=-0.405$), and Coping ($r=-0.466$). The connection between TG and TI components is described as follows: Teaching Self-efficacy ($r=0.972$), Burnout ($r=-0.843$), Resilience ($r=0.951$), Attitudes toward Teaching ($r=0.921$), Openness to Change ($r=0.882$), Classroom Affectivity ($r=0.903$), and Coping ($r=0.674$). Regarding the association between TPW-B and TI subfactors, the results are as follows: Teaching Self-efficacy ($r=0.781$), Burnout ($r=-0.665$), Resilience ($r=0.734$), Attitudes toward Teaching ($r=0.683$), Openness to Change ($r=0.791$), Classroom Affectivity ($r=0.708$), and Coping ($r=0.531$).

Discussion

The present research aimed to determine the connection between TI, TPI, TA, TG, and TPW-B in the EFL settings. This objective was achieved by employing SEM to construct a causal model for evaluating the links between TI, TPI, TA, TG, and TPW-B. Based on the collected data, TPI, TA, TG, and TPW-B predict significantly and considerably TI (Model 1). Also evidenced was the positive effect of TPI, TA, TG, and TPW-B on TI subcomponents (Model 2). The in-depth analysis is presented in the sections that follow.

The evidence gathered suggested that TI may be competent in predicting the TPI of EFL instructors, answering the first research question. Positive effects of TPI on teaching self-efficacy, burnout, resilience, attitudes toward teaching, openness to change, classroom affectivity, and coping were also identified. In other words, the collected data demonstrated that EFL teachers' TI levels directly impacted the cognitive, affective, and social lenses through which they saw the world. In light of the results, it is possible to assert that the TI led to careful and skillful determination and critical evaluation on the part of language instructors. To put it another way, it's possible that immunized teachers managed their emotions using various techniques, each of which was selected based on when the emotion first began to surface.

Cansoy et al.'s (2020), Hiver's (2017), as well as Collie's (2022) findings indicated that TI, TPI, and their psychological well-being are all related to one another. Previous research (e.g., Ma, 2022; Namaziandost et al., 2022a) reveals substantial relationships between self-efficacy, resilience, burnout, and professional success. The research outcomes may be ascribed because since TI may enable the EFL instructors to get valuable insights into all aspects of their premises, they may have received a good grasp of the processes molding their immunity (Hiver & Dörnyei, 2017). However, this finding could not be juxtaposed with others since no previous research has explicitly examined the connection between TI and TPI. Yet, it could inspire new study in the discipline of TEFL.

In addition, the findings demonstrated that the immunity level of EFL teachers had a strong negative relationship with TA (second research question). In a broader sense, the data revealed that self-esteem, adaptability, views on teaching, how to cope, flexibility to change, and instructional setting affectivity had negative and significant effects on TA. Teachers who adopt productive immunity can better manage their anger. It is possible to suggest, in line with Rahimpour et al. (2020), that the emotional wellness of EFL teachers may contribute to a constructive configuration of immunity. Similarly, Hiver (2017) stated that productive immunity would ensure mental and emotional health growth if provided enough support. The results of this research are consistent with those of Burić et al. (2020) and Frenzel et al. (2021), who reported that the emotions of instructors served as a filter that governed how efficacy information is processed.

The results may be explained from the viewpoint that ER could be linked to the delay, rising time, size, length, balance psychological reactions, and adequate immunization. To effectively manage tensions and unpleasant disruptions, they may have used response-focused or antecedent-focused tactics (Deng et al., 2022; Jones & Kessler, 2020) to help them up-regulate their emotions. Furthermore, productive immunity allows them to control their emotions, preventing them from reacting negatively to unpleasant disruptions and tensions at school (Zhao, 2021). The results might likely be explained by the assumption that the emotion-

regulatory tactics would be linked to the delay, rising time, size, length, and balance of psychological reactions and effectively immunized teachers.

Considering the third research inquiry, the findings suggested an advantageous relationship between the TI of the EFL instructors and their TG. The results showed that immunized language instructors could control their emotions and improve their immune systems better than their less reflective colleagues. It was discovered that tenacity in the classroom and a sense of purpose and significance are increased due to productive immunity among EFL teachers. Despite a lack of evidence between TI and TL2G, the findings of Shabani et al. (2022), who attributed strong self-efficacy to increased classroom tenacity, indirectly support this result. The results of Zheng et al. (2020) are consistent with this observation. According to their findings, teachers' resilience in language teaching results from introspection, self-awareness, and the ability to evaluate their performance.

The underlying premises of grit theory (Duckworth, 2016) and teacher L2 grit (Sudina et al., 2021) argue that persistence and enthusiasm for conquering problems are unavoidable components of the characteristics of gritty instructors. They can boost their endeavors and maintain their enthusiasm despite the challenges they face and the lack of progress that has been made because of this personality feature. In light of this, the findings of this research may be absorbed through the lens of these theories that assert self-efficacy helps to control teachers' mental states and emotions, leading to greater levels of professional growth over more extended periods (Duckworth, 2016; Hiver, 2015; Hiver & Dörnyei, 2017). Thus, productive immunity assists educators in developing a positive mindset toward teaching and, as a result, developing influential beliefs in their skills of completing a variety of teaching responsibilities.

Additionally, TPW-B was discovered to be significantly affected by TI as well. It means that immunized teachers are more likely to have a sense of purpose and significance in what they do. Teachers who are resilient in the face of adversity are more likely to feel fulfilled by their profession, which in turn improves their health and happiness. It is possible to conclude that factors such as self-efficacy in teaching, exhaustion, perseverance, opinions regarding teaching, willingness to adapt, responsiveness in the classroom, and tolerance may all play a role in triggering language TPW-B. When teachers believe in their abilities to manage their classrooms effectively, develop engaging and effective lesson plans, and successfully interact with students and colleagues, they are more likely to feel competent and confident in their work (Talbot & Mercer, 2018; Taylor, 2017).

This sense of competence and confidence can contribute to a greater sense of satisfaction and fulfillment in their work, leading to greater overall psychological well-being (Liang et al., 2022; Salehizadeh et al., 2020). Additionally, when teachers feel a sense of control over their work and believe that they have the skills and resources necessary to address challenges that arise, they are less likely to experience stress and burnout (Huang et al., 2019; Seligman, 2018). This is because they are better equipped to manage stressors and navigate difficult situations, which can ultimately lead to better well-being psychologically. Teachers who acquire productive immunity are also likely to desire to improve, which has a beneficial connection with their psychological and mental wellness and helps them manage stress (Zeng et al., 2019). Moreover, the research findings indicate that teachers who have immunity have an unwavering

determination to reach their academic objectives and become successful. These results have significant potential for designing programs and initiatives to promote teacher well-being in EFL instruction.

Conclusion and Implication

The current investigation demonstrated the significant contribution of productive immunity to TPI, TA, TG, and TPW-B and offered robust empirical verification that with the support of TI, EFL teachers can strengthen their practice for a longer period of time. That is to say, the EFL teachers equipped with productive immunity skills and techniques may be able to modify their behaviors and match them with the psychological and mental display regulations of their position. The conclusions that can be derived from the findings of this research suggest that it would be helpful for educator instructors to include productive immunity strategies into their course schedules to construct more effective preliminary and in-service training programs for their teachers. In addition, decision-makers in education are encouraged to take these findings into consideration so that they may have an in-depth awareness of the aspects that determine the efficacy of instructors and educational programs. Given that immunity for language instructors is an emerging trend, it is essential that educators, teachers, and decision-makers become familiar with its crucial role in the profession. As a result, investigations such as the current inquiry provide insightful information that may be helpful to those working in the field of language instruction. There has to be a higher priority in teacher education programs on the need to discuss the contextual, cognitive, and mental factors that influence the success of TPI. The premises of this study may also be helpful for resource developers, who can then use their knowledge to create instructional materials and tasks that make use of TI, TPI, TA, TG, and TPW-B.

Certain constraints on the current study might be explored in future studies. Because the participants were selected using a convenience sample strategy, more research in other educational contexts is needed to broaden the applicability of the results. Second, further longitudinal studies are required to examine the long-term contributions of TI on TPI, TA, TG, and TPW-B since the current research was cross-sectional and demographic characteristics such as instructors' major, mastering background, and cultural and socioeconomic circumstances were not investigated in this research. Consequently, it is advised to researchers that in the future, they consider teachers' demographic factors while conducting comparable research investigations. Last but not least, this study's use of a quantitative approach suggests that future research investigating the link between TI, TPI, TA, TG, and TPW-B could benefit from a mixed-methods approach.

References

- Baierschmidt, J. R. (2022). Grit as a predictor of foreign language proficiency: an investigation of grit and EFL proficiency in Japanese University Students. *English Foreign Lang. Int. J.* 26, 23–46. <https://doi.org/10.56498/3302632022>
- Beauchamp, C., & Thomas, L. (2009). Understanding teacher identity: an overview of issues in the literature and implications for teacher education. *Cambridge Journal of Education*, 39(2), 175–189, <https://doi.org/10.1080/0305764090290225>
- Burić, I., & Frenzel, A. C. (2019). Teacher anger: new empirical insights using a 'multi-method approach. *Teach. Teacher Educ.* 86:102895. <https://doi.org/10.1016/j.tate.2019.102895>
- Burić, I., Slišković, A., & Sorić, I. (2020). Teachers' emotions and self-efficacy: A 'test of reciprocal relations. *Front. Psychol.* 11, 1650. <https://doi.org/10.3389/fpsyg.2020.01650>
- Cansoy, R., Parlar, H., & Polatcan, M. (2020). Collective teacher efficacy as a mediator in the relationship between instructional leadership and teacher commitment. *Int. J. Leadership Educ.* 6, 1–19. <https://doi.org/10.1080/13603124.2019.1708470>
- Collie, R. J. (2022). Instructional support, perceived social-emotional competence, and students' behavioral and emotional well-being outcomes. *Educ. Psychol.* 42, 4–22. <https://doi.org/10.1080/01443410.2021.1994127>
- Corcoran, R. P., & O'Flaherty, J. (2022). Social and emotional learning in teacher preparation: pre-service teacher well-being. *Teach. Teach. Educ.* 110:103563. <https://doi.org/10.1016/j.tate.2021.103563>
- Cormier, D. L., Dunn, J. G., & Dunn, J. C. (2019). Examining the domain specificity of grit. *Personal. Individual Differ.* 139, 349–354. <https://doi.org/10.1016/j.paid.2018.11.026>
- Dale, G., Sampers, D., Loo, S., & Green, C. S. (2018). Individual differences in exploration and persistence: grit and beliefs about ability and reward. *PLoS One*, 13, e0203131. <https://doi.org/10.1371/journal.pone>
- Dagenais-Desmarais, V., and Savoie, A. (2012). What is psychological well-being, really? A grassroots approach from the organizational sciences. *J. Happiness Stud.* 13, 659–684. <https://doi.org/10.1007/s10902-011-9285-3>
- Deci, E. L., & Ryan, R. M. (Eds.). (2002). *Handbook of self-determination research*. Rochester, University of Rochester Press.
- Deci, E. L., & Ryan, R. M. (2008). Facilitating optimal motivation and psychological well-being across life's domains. *Canadian Psychology/Psychologie Canadienne*, 49, 14–23. <https://doi.org/10.1037/0708-5591.49.1.14>
- Deng, J., Heydarnejad, T., Farhangi, F., & Farid Khafaga, A. (2022). Delving into the relationship between teacher emotion regulation, self-efficacy, engagement, and anger: A focus on English as a foreign language teacher. *Frontiers in Psychology*, 13, 1019984. <https://doi.org/10.3389/fpsyg.2022.1019984>
- Diener, E., Heintzelman, S. J., Kushlev, K., Tay, L., Wirtz, D., Lutes, L. D., et al. (2017). Findings all psychologists should know from the new science on subjective well-being. *Can. Psychol.* 58, 87–104. <https://doi.org/10.1037/cap0000063>
- Duckworth, A. L., Peterson, C., Matthews, M., & Kelly, D. (2007). Grit: perseverance and passion for long-term goals. *J. Pers. Soc. Psychol.* 92, 1087–1101. <https://doi.org/10.1037/0022-3514.92.6.1087>
- Duckworth, A. L. (2016). *Grit: The Power of Passion and Perseverance*. Simon & Schuster, Inc.
- Fabelico, F., & Afalla, B. (2020). Perseverance and passion in the teaching profession: Teachers' grit, self-efficacy, burnout, and performance. *J. Crit. Rev.* 7, 108–119. <https://doi.org/>

10.31838/jcr.07.11.17

- Frenzel, A. C., Daniels, L., & Burić, I. (2021). Teacher emotions in the classroom and their implications for students. *Educ. Psychol.* 56, 250–264. <https://doi.org/10.1080/00461520.2021.1985501>
- Kao, Y., & Lin, S. (2015). Constructing a structural model of teachers' professional identity. *Asian Journal of Management Sciences & Education*, 4(1), 69–81. <http://www.ajssh.leena-luna.co.jp/>.
- Larsen-Freeman, D. (2012). On the roles of repetition in language teaching and learning. *Appl. Linguist. Rev.* 3. <https://doi.org/10.1515/applirev-2012-0009>
- Liang, W., Song, H., & Sun, R. (2022). Can a professional learning community facilitate teacher well-being in China? The mediating role of teaching self-efficacy. *Educ. Stud.* 48, 358–377. <https://doi.org/10.1080/03055698.2020.1755953>
- Liu, H., Zhang, X., & Fang, F. (2021). Young English learners' attitudes towards China English: Unpacking their identity construction with implications for secondary level language education in China. *Asia Pacific Journal of Education*, 1–16. <https://doi.org/10.1080/02188791.2021.1908228>
- Liu, Y. (2022). Investigating the role of English as a foreign language learners' academic motivation and language mindset in their grit: a theoretical review. *Front. Psychol.* 13:872014. <https://doi.org/10.3389/fpsyg.2022.872014>
- Frenzel, A. C., Daniels, L., & Burić, I. (2021). Teacher emotions in the classroom and their implications for students. *Educational Psychologist*, 56(4), 250–264. <https://doi.org/10.1080/00461520.2021.1985501>
- Gooran, M., Soleimani, H., Alavi, M., & Jafarigohar, M. (2022). EFL teachers' immunity: a case of online language teaching. *J. Multil. Multic. Develop.* 1–20. <https://doi.org/10.1080/01434632.2022.2044341>
- Harding, S., Morris, R., Gunnell, D., Ford, T., Hollingworth, W., Tilling, K., et al. (2019). Is teachers' mental health and well-being associated with students' mental health and well-being? *J. Affect. Disord.* 242, 180–187. <https://doi.org/10.1016/j.jad.2018.08.080>
- Haseli Songhori, M., Ghonsooly, B., & Afraz, S. (2018). Language teacher immunity among Iranian EFL teachers: a self-organization perspective. *Iranian J. English Academic Purp.* 7, 128–43. http://journalscmu.sinaweb.net/article_87253.html
- Hiver, P. (2015). Once burned, twice shy: The dynamic development of system immunity in language teachers. In Z. Dörnyei, P. D., & MacIntyre, A. Henry (Eds.), *Motivational dynamics in language learning* (pp. 214–237). Multilingual Matters.
- Hiver, P. (2017). Tracing the Signature Dynamics of Language Teacher Immunity: A Retrodictive Qualitative Modeling Study. *The Modern Language Journal*, 101(4), 669–690. <https://doi.org/10.1111/modl.12433>
- Hiver, P., & Dörnyei, Z. (2017). Language Teacher Immunity: A Double-Edged Sword. *Applied Linguistics*, 38(3), 405–423. <https://doi.org/10.1093/applin/amv034>
- Huang, Y. P. (2019). English-medium instruction in law and the humanities in higher education: the role of teacher identity. *High. Educ. Res. Dev.* 38, 1183–1196. <https://doi.org/10.1080/07294360.2019.1621269>
- Janeway, C., Travers, P., Walport, M., & Shlomchik, M. (2005). *Immunobiology: The immune system in health and disease* (6th ed.). Garland.
- Jones, A. L., & Kessler, M. A. (2020). Teachers' emotion and identity work during a pandemic. *Frontiers in Education*, 5, 583775. <https://doi.org/10.3389/feduc.2020.583775>
- Jöreskog, K. G. (1990). New developments in LISREL: Analysis of ordinal variables using polychoric correlations and weighted least squares. *Quality and Quantity*, 24(4), 387–404. <https://doi.org/10.1007/BF00152012>

- Kao, Y., & Lin, S. (2015). Constructing a structural model of teachers' professional identity. *Asian Journal of Management Sciences & Education*, 4(1), 69-81. <http://www.ajssh.leena-luna.co.jp/>.
- Ma, Y. (2022). The effect of teachers' self-efficacy and creativity on English as a foreign language learners' academic achievement. *Front. Psychol.* 13:872147. <https://doi.org/10.3389/fpsyg.2022.872147>
- Mercer, S., & Gregersen, T. (2020). *Teacher wellbeing*. Oxford University Press.
- Mercer, S. (2021). An agenda for well-being in ELT: an ecological perspective. *ELT J*, 75, 14–21. <https://doi.org/10.1093/elt/ccaa062>
- Moè, A., & Katz, I. (2021). Emotion regulation and need satisfaction shape a motivating teaching style. *Teachers and Teaching*, 27(5), 370–387. <https://doi.org/10.1080/13540602.2020.1777960>
- Namaziandost, E., Heydarnejad, T., Rahmani Doqaruni, V., & Aziai, Z. (2022a). Modeling the contributions of EFL university professors' emotion regulation to self-efficacy, work engagement, and anger. *Current Psychology*. <https://doi.org/10.1007/s12144-022-04041-7>
- Namaziandost E., Heydarnejad T., & Saedian, A. (2022b). Language teacher professional identity: The mediator role of L2 grit, critical thinking, resilience, and self-efficacy beliefs. *Iranian Journal of Applied Language Studies*, 14(2), 107-130. <https://doi.org/10.22111/IJALS.2022.7486>
- Pawlak, M., Zarrinabadi, N., & Kruk, M. (2022). Positive and negative emotions, L2 grit and perceived competence as predictors of L2 motivated behaviour. *J. Multilingual Multicultural Dev.* 1–17. <https://doi.org/10.1080/01434632.2022.2091579>
- Rahimpour, H., Amirian, S., Adel, S., & Zareian, G. (2020). A model of the factors predicting English language teacher immunity: A path analysis. *Indonesian J. Appl. Linguist.* 10, 73–83. <https://doi.org/10.17509/ijal.v10i1.24990>
- Rahmati, T., Sadeghi, K., & Ghaderi, F. (2019). English as a Foreign Language Teacher Immunity: An Integrated Reflective Practice. *Iranian Journal of Language Teaching Research*, 7(3), 91-107. <https://doi.org/10.30466/ijltr.2019.120738>
- Salehizadeh, S., Shabani, M., & Malmir, A. (2020). Professionalism: The perceptions of Iranian English teachers of competence and performance in language teaching. *Iranian Journal of English for Academic Purposes*, 9(1), 1-14. <https://dorl.net/dor/20.1001.1.24763187.2020.9.1.1.8>
- Seligman, M. (2018). PERMA and the building blocks of well-being. *J. Posit. Psychol.* 13, 333–335. <https://doi.org/10.1080/17439760.2018.1437466>
- Shabani, M. B., Ashkani, P., & Karimi, M. N. (2022). L2 Teachers' pedagogical thoughts: variations across teachers with varying levels of grit. *Front. Educ.* 7:890834. <https://doi.org/10.3389/educ.2022.890834>
- Sheybani, M., & Miri, F. (2019). The relationship between EFL teachers' professional identity and their critical thinking: a structural equation modeling approach. *Cogent Psychology*, 9(1), 1-20. <https://doi.org/10.1080/23311908.2019.1592796>
- Sudina, E., Vernon, T., Foster, H., Del Villano, H., Hernandez, S., Beck, D., et al. (2021). Development and initial validation of the L2-teacher grit scale. *TESOL Quarterly*, 55, 156–184. <https://doi.org/10.1002/tesq.581>
- Talbot, K., & Mercer, S. (2018). Exploring university ESL/EFL teachers' emotional well-being and emotional regulation in the United States, Japan and Austria. *Chin. J. Appl. Linguist.* 41, 410–432. <https://doi.org/10.1515/cjal-2018-0031>
- Taylor, L. A. (2017). How teachers become teacher researchers: Narrative as a tool for teacher identity construction. *Teaching and Teacher Education*, 61, 16-25. <http://dx.doi.org/10.1016/j.tate.2016.09.008>
- Teimouri, Y., Plonsky, L., & Tabandeh, F. (2020). L2 grit: passion and perseverance for second-language learning. *Lang. Teach. Res.* 26, 1–26. <https://doi.org/10.1177/1362168820921895>

- Teng, F. (2019). *Autonomy, agency, and identity in teaching and learning English as a foreign language*. Springer.
- Thomas, S. P. (1990). Theoretical and empirical perspectives on anger. *Issues Mental Health Nursing*, 11, 203–216. <http://dx.doi.org/10.3109/01612849009014555>
- Wei, R., Liu, H., & Wang, S. (2020). Exploring L2 grit in the Chinese EFL context. *System*, 93:102295
- Xiang, Y. (2021). Negotiating professional identities in teaching language abroad: an inquiry of six native Chinese teachers in Britain. *Lang. Learn. J.* 49, 370–381. <https://doi.org/10.1080/09571736.2019.1610031>
- Xiyun, S., Fathi, J., Shirbagi, N., & Mohammaddockht, F. (2022). A structural model of teacher self-efficacy, emotion regulation, and psychological well-being among English teachers. *Front. Psychol.* 13:904151. <https://doi.org/10.3389/fpsyg.2022.904151>.
- Xu, Y. (2022). The influence of EFL teachers' hope and trust on their academic grit: a theoretical review. *Front. Psychol.* 13:929841. <https://doi.org/10.3389/fpsyg.2022.929841>
- Yuan, R., & Zhang, L. J. (2020). Teacher metacognitions about identities: Case studies of four expert language teachers in China. *TESOL Quarterly*, 54(4), 870-899. <http://dx.doi.org/10.1002/tesq.561>
- Zeng, G., Chen, X., Cheung, H. Y., & Peng, K. (2019). Teachers' growth mindset and work engagement in the Chinese educational context: well-being and perseverance of effort as mediators. *Front. Psychol.* 10:839. <https://doi.org/10.3389/fpsyg.2019.00839>
- Zhao, H. (2021). Positive emotion regulations among English as a foreign language teacher during COVID-19. *Frontiers in Psychology*, 12, 1–5. <https://doi.org/10.3389/fpsyg.2021.807541>
- Zheng, S., Heydarnejad, T., & Aberash, A. (2022). Modeling the interplay between emotion regulation, self-efficacy, and L2 grit in higher education. *Front. Psychol.* 13:1013370. <https://doi.org/10.3389/fpsyg.2022.1013370>