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Research Paper

Iranian EFL Practitioners' Issues at Private Institutes and State Schools

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Abstract
Language teacher immunity aids teachers at every step of the way to stay inspired and dedicated, creative and emotionally stable through the challenges they experience. The main purpose of this survey-based research study was to examine 60 teachers' immunity in Tabriz. Moreover, it attempted to investigate the impacts of various variables (e.g., role overload & job stress) on these teachers' immunity in private institutes and public-schools. In addition, it aimed to scrutinize the differences between teachers' immunity in the above-mentioned academic settings. The second goal was to see whether there is any relationship between role overload and teacher immunity. The third objective was to see whether there is any relationship between job stress and teacher immunity. The results indicated that public-school teachers' immunity was higher than private school teachers' immunity. The findings also suggested that role overload and job stress both have negative relationships with teacher immunity. Researchers working in

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the fields of teacher education and the production of instructional materials can benefit from this study's findings. Teacher education courses must be revised and updated to have a self-awareness component.

***Keywords**:* Teacher Immunity, Immunity Type, Role Overload, Job Stress

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1. Introduction

As long as people have existed, language learning has existed. People have always been interested in teaching and learning languages from the. English started to be employed as a language of teaching by the end of the 16th century and it was not until the end of the 18th century that the study of contemporary languages began to draw the attention of academics (Morrison, 2012). Since then, language education has experienced many ups and downs to achieve the intended outcomes in language education (Brown, 2000). According to the literature, the emphasis has been mostly on teaching strategies and language learners over the years, and merely recently does it appear that the trend is shifting towards language teachers for they play a major role in language education.

Teachers play the essential role of "critical pillars" (Hiver & Dörnyei, 2017) in any educational environment. They play a critical role in the vivacity of the classroom atmosphere and students' engagement in an educational setting and as Hiver and Dörnyei (2017, p.405) claim they are the "architects of society". Hiver (2015) metaphorically referred to the psychological armor that language teachers build up to protect themselves from the stress they experience at work as language "teacher immunity", a term borrowed from the medical world. It is a context-bound dynamic construct that developed as a result of challenging situations that appeared in

the classroom. Teacher immunity has shown to be a double-edged sword that may either facilitate or hinder the teachers' ability to deliver effective lessons.

Both its positive and negative consequences can be seen in how well or poorly teachers handle unforeseen challenges in the classroom. Teachers have an undeniably important position in shaping their learners' future for better or worse. Teachers confront perturbations and challenges in various educational environments originating from various sources like school managers, educational authorities, parents and students themselves. Teacher immunity emerges as a protective shield against the constraints and threats imposed on them and their professional identity in their institutional context. Immunity in teaching is drawn from immunity in its biological sense which is defined as the ability of an organism to resist a particular infection or toxin of the external environment, or as a defense mechanism which deals with disagreeable experiences to maintain teacher equilibrium.

Teachers' behavior, career prospects, and identity is influenced by their immunity (Hiver 2015, 2016). Teacher immunity is a shield which reduces the negative effects of perturbations in the educational context on teachers' professional identity (Hiver & Dörnyei 2017). To put it in another way, teachers are protected by a defense system to overcome and cope with challenges in threatening contexts in order to produce the desired results in learners through valid instruction (Hiver, 2017). Immunity impacts just about anything in teachers' professional careers and studying teacher immunity raises our understanding of their identities and job proficiency (Hiver, 2015; Hiver & Dörnyei, 2017).

Involuntary workload results in a dearth of teacher autonomy and support which gives rise to discouragement of creativity and reflection and deteriorates endurance of frustration and approachability to others (Hiver &

Dörnyei, 2017). Language teachers' job-related stress is receiving increasing attention since it has significant financial repercussions for educational institutions due to job discontent, poor staff productivity, and deteriorated physical and mental health (Dua, 1994).

Productive immunity equips teachers with high motivation, openness to change, resilience, and enhanced self-efficacy, whilst teachers with maladaptive immunity develop rigidity, risk avoidance, and resistance to change. Maladaptive immunity limits creativity and jeopardizes their mental health whereas the productive immunity is characterized by greater levels of resilience openness to change self-efficacy and emotional control. Teachers should have some levels of immunity to deal with the professional obstacles inherent in their line of work. These obstacles result in teachers' great rates of turnover and low levels of well-being (Greenier et al., 2022).

Lack of immunity in teachers prevents them from being adaptive. Moreover, it inhibits their change and growth and disrupts their learners' valid education. Providing teachers with circumstances which helps them to achieve some degrees of productive immunity through self-organization process facilitates sound teaching practice and maximum teaching effectiveness. Significant costs associated with employee satisfaction and health are caused by job stress. The majority of people consider their work to be an integral part of their daily lives, as a result, their jobs are essential for maintaining one's health and happiness. Employee job stress is an issue that is getting worse, and it has been linked to increased health costs, absenteeism, and turnover rates, more accidents and ineffective performance (Hiver, 2016).

Teacher job stress can impair the quality of instruction, drive them to quit, and lower student involvement in activities. The duties and responsibilities of a teacher are physically and mentally draining. Teachers have to put a lot of

energy on a daily basis to fulfill their responsibilities in their classroom as well as their personal life. Role overload is a condition of conflict that happens when the amount of demand exceeds the resources that are accessible to the person and the person is forced to complete a lot of activities that require attention. Vanishree (2014) found that work overload causes stress among employees which has a negative impact on their performance and ability to concentrate. According to studies, employees who are overworked perform less efficiently and are less satisfied with their professions. This subpar performance will eventually result in inferior services which will damage the organizations' credibility.

The present study was set out with the aim of exploring the possible relationship between EFL teachers' job stress, role overload, and their immunity in two diverse contexts which are public-schools and private institutes.

2. Literature Review

The term "immunity" comes from the Latin immunize and refers to the state or quality of being resistant to a particular infectious disease or pathogen (Chiappelli & Liu, 2000). A defense mechanism that guards an organism against harmful, unfavorable, or detrimental effects of its environment is widely referred to as immunity (Hiver, 2016). Biological immunity is the most familiar understanding of this term which is defined as the ability of an Organism to resist a particular infection or toxin of the external environment or as a defense system which deals with disagreeable experiences to maintain equilibrium (Hiver, 2017). The main purpose of immunity is protection from illness and a damaged immune system increases vulnerability to disease (Pancer & Cooper, 2006).

2.1 Complexity theory and multifaceted nature of teacher immunity

We as humans are engaged in "a complexity race", while we cause additional complexity by our involvement and manipulation in the outer world, we also search for new techniques for tackling complexity reduction (Nowotny, 2005). The complexity meta-theory brings together a bunch of relational concepts, including the idea that some events involve several elements which evolve together in a nonlinear fashion to eventually produce spectacular emergent patterns (Holland, 2012). As Hiver (2016) pointed out, teacher immunity is a concept that indicates the application of complexity theory to the field of language teaching. More specifically, as Hiver (2016) pointed out, teacher immunity constitutes a multifaceted and complex construct owing to the fact that it is influenced by multitudinous factors that interact with each other in complicated ways.

Complexity as a meta-theory is used to examine the nature of factors that contribute to dynamic change and emergent outcomes in the social environment (Hiver, 2016). Presumably due to the developmental reasons, we lack a strong innate capacity to consider the interplay of numerous individual pieces in combination, or to deal with the results of the complex systems or circumstances where these outcomes are multi-determined (Northrop, 2011). The notion that causal mechanisms exist independently of other qualities and connections is outdated (Groff, et al., 2008). There are no single factors which could be pinpointed in various outcomes. Effects are the results and byproducts of numerous complex adaptive mechanisms and causal Analysis must clarify why certain outcomes were led to rather than any other in the course of development (Chiappelli & Hodgson, 2000; Morrison, 2012). Complexity does not and should not be expected to provide off the shelf study models like other frameworks do (Hiver, 2016). The

advantage offered by Complexity Theory is its approaches to examining how the patterns of the whole have emerged from the interplay of the component parts (Larsen-Freeman, 2012, 2013). The conscious attention on the goal as well as the sometimes-disregarded procedures or processes via which the conclusion is obtained are intrinsic features of studying human phenomenon from a Complexity Theory perspective (Haken, 1997).

2.2 Adaptivity and teacher immunity

Every system has a past. The past and context play an extremely crucial role in the developmental process of these systems (Hiver, 2016). In these complex systems, where many different types of factors intermingle throughout time, small alterations in some of these factors and parameters at an early stage may have a significant influence on the final adaptive outcome (Kauffman, 1995). As Hiver (2016) pointed out, teacher immunity is an adaptive construct due mainly to the fact that it is likely to change over the course of time and because of the influence of teacher internal or external factors in various academic settings. In the social world, not much is settled. Change is constant. Systems continuously adjust their internal functioning structure in order to adapt to the perturbations caused by the environment. One of the main characteristics of systems is their capacity to adjust and learn.

2.3 Productive and maladaptive types of teacher immunity

Hiver (2017, p. 669) stated that immunity is "a robust armoring system that emerges and responds to high intensity threats and allows teachers to maintain professional equilibrium and instructional effectiveness", and it was employed in order to improve language teachers' efficiency and mental health. The language teacher immunity described here can take the form of either a productive resistance or a counterproductive teacher autoimmunity, similar to how there are good and bad cholesterol through food intake.

Teacher autoimmunity develops as a result of experience-related remnant which turns into a long-lasting maladaptive fossilized resistance which characterizes teachers as susceptible, passive, deeply distrustful, and insufficient. Despite being an effective protective mechanism for the body which shields it against viruses and illnesses, some abnormal and damaging immune system reactions do happen occasionally (Maier et al., 1994). In the context of education, counterproductive immunity may result in unfavorable outcomes like extreme rigidity, conservative attitude in education, resistance to change, and lack of openness to novel concepts. Immunity is advantageous from the system's point of view because it ensures its survival (Holland, 1992). Nevertheless, prolonged periods of extreme stability could result in a detrimental maladaptive autoimmunity. Teacher immunity bring about narratives that are maladaptive and which inhibits any systematic response coming from teachers; it may also lead to teachers being proud of their states (McAdams, 2006). The positive immunity can result in greater dedication, involvement, and boosted self-esteem (Bullough, 2005). A maladaptive immune system may change into a productive one and vice versa.

Maladaptive systems should not be seen as bad and harmful; rather, it may be possible for teachers to create a better system because these systems prompt teachers to question themselves and engage in critical thinking. Teachers equipped with the productive immunity seem to be able to notice, distinguish, and tailor a suitable reaction to the certain disruptions that they come across in the classroom. It is a teacher's job to foster an environment where their students will be motivated and excited to learn. Viewing the language classroom from an ecological standpoint, learner vision cannot exist without teacher vision and as a result, the teacher's feelings, objectives, zeal and aspiration can all spread to students and create cognitive equivalents in them. Nearly every aspect of a teacher's occupation could be impacted by

teacher immunity. With teacher immunity, language teachers are able to pull through and stay within their career on the long term, defend against emotional disturbances, personal threats, and motivational downfalls. Teachers who don't build up teacher immunity are likely to be exposed to typical workplace situations like not having enough time to prepare for their classes, being required to complete an inordinate amount of paperwork, frequently teaching oversized classes without sufficient support, and not being considered in the decision-making processes (Greenglass, 2000). Owing to this core purpose of maintaining the system's existence, building a productive and strong resistance to adversity is a necessity to being a successful teacher (Bullough, 2005).

In his study, Hiver (2017) used factor analysis to identify teacher immunity sub-constructs. He asserted that teacher immunity is constructed by seven main sub-constructs: coping, openness to change, attitudes to teaching, burnout, teacher self-efficacy, classroom affectivity, and resilience. Coping consists of the self-generated tactics that educators use to dissipate their negative feelings in the class. According to Compas et al. (2001), coping tactics are "conscious volitional efforts to regulate emotion, cognition, behavior, Physiology, and the environment in response to stressful events or air circumstances" (p.89). Openness to change, according to Hiver (2017), is the ability of a teacher to recognize the significance of changes in their field and make voluntarily and purposeful efforts to adapt to them when necessary. The teachers' opinions on teaching characterize their attitudes concerning the effectiveness of their instructions and performance in the classroom. Burnout is a mental, multifaceted state that is mainly linked to occupational and organizational stress, and results from conditions that place the teachers under a lot of stress over a prolonged amount of time (Maslach & Leiter, 2008). Self-efficacy typically represents "people's judgments of their

capabilities to organize and execute a course of action required to attain designated types of performances" (Bandura, 1982, p. 391). The broad spectrum of emotions that teachers encounter when instructing students is referred to as classroom affectivity. resilience is the ability of the teacher to adapt to new situations and prevent emotional breakdowns. Resilience is not a built-in notion, but a dynamic and developmental one (Gu &Day, 2007). "It is the process of, capacity for, or outcome of successful adaptation despite challenging or threatening circumstances" (Pearce & Morrison, 2011, p.48).

2.4 Self-organization

Self-organization is demonstrated when systems adapt to surrounding conditions by altering their internal organization, or their general function through a process known independently of any overt direction (Dekker, Cilliers, & Hofmeyr, 2011). Teachers are viewed as a complex system going through self-organization process, they experience the required disturbances to start the development route in the first stage of the process which is the triggering stage, then they implement coping strategies to rebalance the system's behavior during linking stage. In the realignment stage, the system experiences a phase change which results in the system regaining equilibrium and recovering balance; eventually in the final stage which is the stabilization stage the outcome becomes the part of teacher identity and the emerged outcome transitions into an attractor state.

2.5 Narrative formation

To reach a productive and resilient immunity through self-organization, teachers must create productive narratives which help them to be able to understand their life events (McAdams & Pals, 2006). The consensus among academics is that confronting issues directly and attempting to resolve the troubling occurrence positively promotes greater understanding and enhances prosperity than repressing, rejecting, or distancing oneself from those events

(Lundberg, 2000). Autobiographical reasoning is when people may attempt to cope with traumatic life events by building a broad interpretation of their being based on specific life events (McAdams, 2008). If the teachers are to learn from and get past the challenging situations and negative events that frequently occur in their lives, they need an explanation for them. It might be feasible to affect the development of narratives and assist teachers to devote to a positive resolution of that incident by offering a convenient scheme for them to reflect on how the unpleasant events took place and what effects they may have (McAdams, 2006).

2.6 Role overload

A teacher's obligations need a lot of mental and physical effort. Teachers must spend a lot of energy on a daily basis to fulfill their responsibilities in the classroom as well as their personal and family obligations (Alghamdi, 2017). The conduct anticipated of an institutional member might be referred to as a position. Every person holds positions in a variety of these institutions. According to Merton (1957), each person possesses a position set which is made up of all the positions that a particular person holds inside various organizations. Typically, role enactment is used to describe how an incumbent that holds a position behaves. The same positional demands are carried out in distinctive ways by various people. There are dissimilarities even in the enactment of a role with clearly stated expectations. Due to the differences between individuals, there is some room for each individual's interpretation of the role expectations. A reason for the mismatch between the expectations and the actual behavior is that some expectations are not in line with each other, and they conflict. Role overload is a sort of role conflict brought on by extreme demands on a person's time and energy (Reilly, 1982). Role conflict is described as "the simultaneous occurrence of two or more sets of pressures such that compliance with one would make more

difficult compliance with the other" (Kahn et al., 1964, p.19). Role overload and role conflict are separate sources of stress. The person faces role conflict when there are opposing conflicting demands of them in the role set. It is possible that the focal person in the role set won't realize role overload if they have enough time and energy to handle these conflicting role obligations. Role overload is perceived when "the total demands on time and energy associated with the prescribed activities of multiple roles are too great to perform the roles adequately or comfortably" (Voydanoff, 2002, p.147). According to Marks (1977), the amount of time and energy put into a job may reflect both the person's availability of time and energy and the person's devotion to their jobs. Sometimes excuses given by disinterested parties for their lack of commitment in their job can be misconstrued for role overload. Studies (e.g., Kashef & Khalili, 2023; Mohammadnia & Khalili, 2014) show that staff who are overburdened with work perform less efficiently and are less contented with their jobs. This performance will eventually lead to low quality products and services which will cause loss of credibility of the organizations in the market. Additionally, it would result in work-related stress, mental tension, physical illness, discontent, and bad attitude among the staff (Alghamdi, 2017). Vanishree (2014) noticed that work overload causes stress amongst employees that leads to mental diseases, insufficient performance, and poor concentration. "Teaching is a rewarding but demanding profession" (Jomuad et al., 2021, p.48). Working many hours in a day and a heavy workload can cause burnout among teachers. Without the right support, teachers run the risk of being overworked and neglecting their own psychological or physiological health. Jendle and Wallnäs (2017) argued that burnout would occur from being unable to cope with job demands under too much pressure. As they explained, compared to other occupations, teaching in Sweden had higher than average levels of workload and stress

related symptoms. Most of the instructors said they felt their workload was excessive. Most teachers quit their careers because of the working conditions rather than other various reasons like their payment. According to research, a teacher shouldn't be expected to take on more duties without receiving the payment and that government initiatives were the main reason for the high work overload (Khalili et al., 2022). Teachers offered the following suggestions as potential remedies for the excessive workload: 1. Time: teachers demand more time during the day to do their tasks, 2. Teachers: more teachers are needed and their duties and responsibilities must be specified, 3. Smaller classes: they are asking for smaller classes to ease the marking and student behavioral issues, 4. Government initiatives: the general consensus across all the schools is that there should be less initiatives and more freedom for each school to create their own program, 5. Support staff: there is a demand in schools for administrative and clerical assistance, 6. Teaching assistants: more well-trained assistants are needed to help teachers in classrooms (Dobakhti & Khalili, 2024).

2.7 Job stress

Job stress is a trend that shows certain aspects of the workplace that put people at risk. When employees are unable to manage their time to complete their tasks, it can lead to stress at work. Job-related stress has harmful effects on both the individual and the workplace (Khalili & Zohrabi, 2024). Role-related responsibilities, needs, resource management, and restricted time availability are cited as primary reasons of stress among academicians. Stress related to job is receiving increasing attention since it has significant financial repercussions for educational institutions due to job discontent, poor staff performance, and deteriorated physical and mental health (Dua, 1994).

A certain amount of stress is seen to be beneficial since it can boost creativity and performance, but too much stress can hinder creativity and

have a negative impact on employee performance. Taris et al. (2001) claimed that academicians who were under stress expressed withdrawal behaviors such as negative perspective on their job, a reduced level of dedication, and they're willing to leave their profession. According to literature studies, teachers are more stressed than other individuals in other occupations (Kinman & Jones, 2004).

"Job stress is seen as a first-level result of the organization and job" (Parker & Decotiis, 1983, p.160). It is an unpleasant feeling that is different from the second-level results of job stress. Job stress has two dimensions: anxiety and time stress. Both factors were highly correlated with each of the five organizational stressor groupings. Parker and Decotiis (1983, p.161) claimed that stress related to job is "a particular individual's awareness or feeling of dysfunction as a result of perceived conditions or happenings in the work setting". People work in environments where events and circumstances might cause psychological and/or physiological deviations from normal functioning. These aberrations are thought to be the result of foreseen or missed chances, restrictions on goal-oriented conduct, or requirements leading to significant but unclear results. Stress is characterized as a divergence from regular physiological or psychological functioning brought on by pressures in the person's close environment. The physiological dysfunctions rather than the stress itself are more likely to be the result of stress than its cause, and for job stress to have any negative effects at all, there must at least be some levels of awareness since whatever is normal for one person's functioning might be abnormal for another. In contrast to longer lasting aberrations, the authors believe that stress is a temporary emotion.

The long-term second level outcomes are seen as the result of job stress rather than the stress itself. They happen later in life and are typically brought on by chronically high levels of occupational stress (Parker & Decotiis,

1983). As mentioned by Selye (1976), stress is additive. The sense of stress may vanish rapidly without causing any second-level outcomes if a stressor is immediately eliminated or the person is well-off in coping with it. Second-level outcomes are more possible to happen if stress is high or long lasting. Depending on its severity, duration, the number of operational stressors, and the person's ability to let go of the stress, job stress may be temporary, or it may have longer lasting second-level outcomes.

The term job stress is used to characterize how someone feels when they are forced to change their typical behavior at work due to opportunities, limitations, or demands linked to potentially significant job-related outcomes. Job stress is both uncomfortable and undesired, and it can be distinguished from a positive motivational feeling of excitement that comes from challenging and reachable objectives. The first component of job stress is closely related to "the feelings of being under substantial time pressure" and is called time stress. The second element is called anxiety and is related to "the job-related feeling of anxiety" (Parker & Decotiis, 1983, p. 169).

Organizational designers and managers have the ability to identify the sources of stress and where necessary to eliminate or regulate them. Lazarus (1990) claimed that stress is a subjective issue. Job-related stress is a psychological condition that people experience when they are confronted with demands, limitations, and possibilities that could have a significant and unpredictable impact. Job stress is a personal response, is organizational and job related, and it is distinct from general stress (Chen, 2008). It refers to both psychological stress at work and a person's capacity to manage a specific situation (Jamal, 2004). A poor fit between a person and their job leads to job stress, this subjective phenomenon may cause feelings at work like rage, anxiety, depression, fear, or disgust (Lazarus, 1990).

Job stress should be distinguished from other kinds of stress since it is psychological stress related to work. The inability to execute the job effectively due to inadequate training, lack of resources, or conflicting job demands can all lead to job stress (Jamal, 2004). People may also experience job stress if they have a heavy workload (Jamal, 2004). In a study on stress in New Zealand, it is reported that half of the academics believed that their jobs are stressful and about 80% of them claimed that they are experiencing higher workload and more stress in recent years. Additionally, 46% anticipated a higher workload in the future (Boyd & Wylie, 1994). Similarly, in the research conducted by The United Kingdom Association of University Teachers (AUT, 1990), 49% of staff members stated that their employment was stressful and 77% claimed that job-related stress had increased in the past few years. Stress is dynamic and ever changing and develops because of the ongoing interaction between the individual and their environment. "Psychological stress which results from the interplay of system variables and processes, depends on an appraisal by the person that the person-environment relationship at any given moment is one of harm, threat, or challenge" (Lazarus, 1990, p.4).

In a study which was conducted in New Zealand universities, it was found that job-related high workload and stress led to decreased teaching and research standards, decreased academic time spent on research and professional development, and more interpersonal disputes among the members. Furthermore, it was revealed that stress has detrimental effects on academics' physical and emotional well-being, family connections, and their entertainment (Boyd & Wylie, 1994). Continuing job stress can have a severe impact on a teacher social and personal health as well as their life quality, it can lead to burnout, depression, frustration, anxiety, drug addiction, poor interpersonal communication, lowered productivity, and delay at work.

Haseli et al. (2018) investigated the role of teacher immunity as an indicator of language teachers' behavior. This study sought to identify the sort of language teacher immunity that was most prevalent amongst teachers in Iran by using a mixed method approach. The results of the survey and interviews revealed that Iranian English language instructors tended to have maladaptive immunity.

A study was carried out by Nawal G Al-Ghamdi (2017) in Saudi context which is entitled as role overload and job stress among the female university teachers. The study's primary goal was to look into job stress and role overload. The participants were 100 university teachers from King Abdul Aziz University, Jeddah. Reilly's role overload scale and the job stress survey were used to evaluate both study variables. According to the findings role overload is a major predictor of job stress. Research suggests that employees who are overworked perform less effectively and are not satisfied with their careers. As a result, the organization's credibility will be damaged. Teachers may experience role overload because they work under strict deadlines and are responsible for finishing a variety of distinct responsibilities in a short amount of time which may also cause job stress.

Songhori and Ghonsooly (2018) investigated the prevalent language teacher immunity types and their developmental process in Iranian English teachers. The results of the analysis showed that immunity which was maladaptive was a common category of immunity amongst Iranian English teachers.

2.8 Research Questions

This study intended to explore the possible relationships of teachers' immunity, role overload, and job stress in two contexts. Regarding the above-mentioned objective, the following research questions were put forward:

1. Is there any difference between teachers' immunity in private institutes and public-schools?
2. Is there any relationship between role overload and Iranian EFL teachers' immunity?
3. Is there any relationship between job stress and Iranian EFL teachers' immunity?

3. Methodology

3.1 Design of the study

Mackey and Gass (2005, p.92) note that questionnaires are "one of the most common methods of collecting data on attitudes and opinions from a large group of participants". The present study intended to find out the relationship between, job stress, workload, and teacher immunity. More specifically, in this study, Iranian EFL teachers' workload and job stress were regarded to be the predictor variables and their teacher immunity was considered as the outcome variable. This study was conducted to probe the professional lives and experiences of L2 teachers in the Iranian L2 classrooms in two different contexts. The data was gathered, processed, and interpreted using a survey-based approach. In the study, quantifiable information was collected using questionnaires that were created to gauge participants' perception of work overload, job stress, and immunity of Iranian EFL teachers. First the collected data are reported using work overload questionnaire, job stress questionnaire, and teacher immunity questionnaire. Three close-ended questionnaires were used to gather data on participants' demographic information, their immunity, their workload, and job stress development in EFL teaching contexts. Likert-scale questionnaires were utilized to collect the data.

3.2 Participants

The job stress scale, role overload and teacher immunity questionnaires were administered to 60 EFL language teachers in two different contexts. Half of these teachers were employed at public-schools and the other half

were working in private institutes. They were teaching at different levels of proficiency (elementary, intermediate, and advanced). They all had B.A., M.A., or Ph.D. degrees in different majors like English language teaching, English literature, translation studies, or other unrelated fields of study. The participants were not chosen from a specific age group and their age range was 21 to 55.

Table 1
The Participants' Demographic Information

Demographic Aspects	Information			
Gender	Male: 23	Female: 37		
Academic degree in TEFL B.A. in other majors: 6	B.A: 20	M.A: 22		PhD: 12
Age	20s: 25	30s: 22	40s: 7	50s: 6
Job experience	1-10yrs: 32	11-20yrs: 19		20-30yrs: 9

3.3 Instruments and material

For the purposes of the current study, three instruments were exploited. The instruments are questionnaires and they were administered to gather quantitative data in the current study.

3.3.1 Immunity questionnaire

The researchers used Hiver's (2017) Teacher Immunity Questionnaire to scrutinize the participants' teacher immunity. The questionnaire includes 39 items that are rated on a 6-point response scale ranging from 1 (Strongly disagree) to 6 (Strongly agree). Based on Hiver (2017), this questionnaire studies the main features of teacher immunity, coping, attitude to teaching, burnout, openness to change, classroom affectivity, resilience, and teaching self-efficacy. Seven elements were identified to be crucial to the teacher immunity outcomes. Hiver (2017) contends that the validity and reliability indices of this questionnaire are acceptable; α = 0.82, 0.80, 0.82, 0.85, 0.74, 0.81, 0.78. In the present study, the researchers used Cronbach's alpha measure to examine the reliability of this questionnaire in Iranian context in a pilot study that involved 15 male and 15 female EFL teachers who were

similar to the participants of the main study in terms of their characteristics. Based on the results, the reliability indices were α = 0.79, 0.77, 0.75, 0.81, 0.72, 0.78, and 0.77 and the instrument could be used in this study.

3.3.2 Role Overload Questionnaire

Reilly created a 13-items scale in 1982 to measure role overload. Despite the scale's widespread use, most studies failed to assess the unidimensionality of the scale. Seven of the items got deleted after going through a confirmatory factor analysis. The t-value of each of the discernible markers of the role overload was substantial and therefore the 6-item role overload scale was proven to fit the criteria of unidimensionality. According to findings of the study by Thiagarajan et al. (2006), role overload could be determined accurately and validly using these scores from the reduced version of the scale. Cronbach's alpha was 0.89 for the scores attained from the six-item role overload scale. The results of the Cronbach's alpha analysis in the above-mentioned pilot study indicated that reliability index of this instrument was 0.85 and it could be used in Iranian EFL context.

3.3.3 Job stress questionnaire

Job stress is measured by Parker and Decotiis's job stress questionnaire (1983). This scale was originally employed to identify the organizational detriments of job stress. The questionnaire comprises 12 items and is marked on a six-point Likert scale ranging from "strongly agree" to "strongly disagree". Job stress has two facets: time pressure and anxiety. The overall reliability measured using Cronbach's alpha coefficient and described by Wu et al. (2010) is about .85. According to Glazzer et al. (2004), the questionnaire reliability as reported in several research ranged from 0.78 to 0.91. Parker and Decotiis (1983) used Cronbach's alpha coefficient to calculate the reliability of the two distinct dimensions of stress and the results were 0.86 and 0.74. They assessed the correlation between the variables used

as scales to evaluate the validity and reported it to be 0.54. Based on the results of Cronbach's alpha analysis, the reliability index of this instrument was 0.81 and it could be utilized in the present study.

3.4 Ethical Considerations

Within this study, the ten ethical principles listed by Bryman and Bell (2007), were compiled. First off, there was no harm of any kind inflicted upon the participants. Respecting the participants' dignity was of utmost importance for the researchers. The participants gave their unreserved consent and the anonymity of those taking part in the research was guaranteed. Together with the preservation of the participants' privacy and a sufficient degree of confidentiality of the data, exaggerating the study's goals and objectives was avoided. All financial support sources, affiliations of any kind, and any conflicts of interest were disclosed. Finally, all the information shared about the research was truthful and transparent and it was avoided to depict the results of the data in a biased way.

3.5 Data collection procedure

Teachers' immunity, role overload, and job stress were explored through the online distribution of the questionnaires. The three questionnaires were dispersed among the research participants both electronically and personally. The electronic version of the questionnaires was made using a website. The researchers may easily and conveniently acquire the needed set of data from teachers working in different schools with a wide range of experience by conducting these online user-friendly survey forms. The related link was sent to the participants using messaging apps and these language teachers willingly completed the questionnaire and returned it online. The participants took about 15 minutes to answer the questionnaires. No deadline was imposed for submitting their answers. They were asked to respond to the items in the questionnaires based on their own opinions, not based on their

perceptions of the teaching rules or prevailing cultural trends. In order to comply with the ethical norms, every aspect of the questionnaires and the study objectives were explicated to the participants, and they were also assured of the data's confidentiality. The goal of this study was explained to the participants, and they were asked to take their time and thoughtfully and patiently give their responses to the items. The EFL teachers were first asked to complete part of the questionnaires which were devoted to their demographic information. After that, they were asked to answer the questions or items choosing an answer from one to six on a Likert scale (1 strongly disagree, 2 disagree. 3 slightly disagree, 4 slightly agree, 5 agree, 6 strongly agree). The Persian-translated version of the questionnaires was made available to the participants in order to account for their shared first language and to lessen the measurement error. Also, positive and negative statements were included in the questionnaires, therefore the responses were reversely coded to the negative statements. Then the correlation between the variables were calculated.

3.6 Data Analysis

The descriptive and inferential statistics were employed to scrutinize the data which was collected using the questionnaires.

4. Results and Findings

4.1 Introduction

The data collected for the purpose of the present study were analyzed using descriptive and inferential statistics. This section presents the results of the data examination. Moreover, at the end part, the results of the study are discussed.

4.2 Private and Public-schools Teachers' Immunity

The first research question dealt with the significant differences between Iranian EFL teachers' immunity in private and public-schools. The researchers distributed the teachers' immunity questionnaire among 30 teachers in order to measure teachers' immunity in both private and public-schools. The mean score of the teachers' immunity was considered as the private and public-school teachers' immunity scores. The statistics relating to descriptive part of the teachers' immunity scores are displayed in Table 2.

Table 2

Descriptive Statistics of Iranian EFL Teachers' Immunity Scores between Private and Public-schools

	Groups of Schools	N	Mean	Std. Deviation
Openness to Change	Private Schools	30	19.30	6.36
	Public Schools	30	29.33	4.90
Self-efficacy	Private Schools	30	21.17	7.15
	Public Schools	30	36.60	3.64
Attitudes towards Teaching	Private Schools	30	19.00	6.60
	Public Schools	30	21.53	5.52
Classroom Affectivity	Private Schools	30	22.77	2.76
	Public Schools	30	29.33	4.65
Resilience	Private Schools	30	23.20	2.88
	Public Schools	30	22.13	3.72
Burnout	Private Schools	30	20.80	3.69
	Public Schools	30	22.47	4.56
Coping	Private Schools	30	20.73	2.74
	Public Schools	30	23.57	3.78
Sum Teacher Immunity	Private Schools	30	146.97	24.22
	Public Schools	30	184.97	10.39

school teachers' openness to change scores were 19.30 and 6.36 whereas, the mean score and standard deviation of the public-school teachers' openness to change scores were 29.33 and 4.90. Also, the mean score and standard deviation of the private school teachers' self-efficacy scores were 21.17 and 7.15, but the mean and standard deviation of the public-school teachers' self-efficacy scores were 36.60 and 3.64. Besides, the mean score and standard deviation of the private school teachers' attitude towards teaching scores

were 19.00 and 6.60, while the mean score and standard deviation of the public-school teachers' attitude towards teaching scores were 21.53 and 5.52. Moreover, the mean score and standard deviation of the private school teachers' classroom affectivity scores were 22.77 and 2.76, but the mean score and standard deviation of the public-school teachers' classroom affectivity scores were 29.33 and 4.65. Similarly, the mean score and standard deviation of the private school teachers' resilience scores were 23.20 and 2.88, while the mean score and standard deviation of the public-school teachers' resilience scores were 22.13 and 3.72. In the Same way, the mean score and standard deviation of the private school teachers' burnout scores were 20.80 and 3.69; however, the mean score and standard deviation of the public-school teachers' burnout scores were 22.47 and 4.56. Moreover, the mean score and standard deviation of private school teachers' coping were 20.73 and 2.74, while the mean score and standard deviation of the public-school teachers' coping were 23.57 and 3.78. Finally, the mean score and standard deviation of the private school teachers' immunity scores were 146.97and 24. 22. However, the mean score and standard deviation of the public-school teachers' immunity scores were 184.97 and 10.39. On the other hand, in order to determine the normality distribution of the private and public-school teachers' immunity scores, the researchers used One-Sample Kolmogorov-Smirnov test and Shapiro-wilk test. Table 3 illustrates the results of this test.

Table 3

Normality Tests for the Iranian EFL Teachers' Immunity Scores between Private and Public-schools

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Groups of Schools	Statistic	df	Sig.	Statistic	df	Sig.
Openness to Change	Private Schools	.098	30	.200*	.963	30	.373
	Public Schools	.107	30	.200*	.941	30	.096
Self-efficacy	Private Schools	.120	30	.200*	.958	30	.271
	Public Schools	.135	30	.174	.938	30	.080
Attitudes towards Teaching	Private Schools	.194	30	.105	.848	30	.501
	Public Schools	.139	30	.143	.946	30	.129
Classroom Affectivity	Private Schools	.139	30	.146	.946	30	.134
	Public Schools	.257	30	.310	.874	30	.202
Burnout	Private Schools	.091	30	.200*	.978	30	.783
	Public Schools	.106	30	.200*	.964	30	.391
Coping	Private Schools	.128	30	.200*	.973	30	.614
	Public Schools	.140	30	.136	.952	30	.186
Resilience	Private Schools	.144	30	.114	.937	30	.077
	Public Schools	.153	30	.071	.940	30	.093
Sum Teacher Immunity	Private Schools	.144	30	.112	.924	30	.133
	Public Schools	.117	30	.200*	.944	30	.118

Teachers' openness to change (p= .200), self-efficacy (p= .174), attitudes towards teaching (p= .143), classroom affectivity (p= .310), burnout (p= .200), resilience (p= .071), coping (p= .136), and for sum teachers' immunity (p= .200) were higher than .05. So, it was revealed that the Iranian private and public-school teachers' immunity and its factors had a normal distribution. Once the normality distribution assumption was fulfilled, the Independent samples t-test was ran to detect whether there was a noteworthy disparity between the private and public-school teachers' immunity scores or not. Table 4 specifies the results of the Independent samples t-test.

Table 4

Independent Samples T-test for Iranian EFL teachers' Immunity Scores between Private and Public-schools

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Openness to Change	Equal variances assumed	3.684	.260	-6.842	58	.000	-10.03	1.47	-12.97	-7.10
	Equal variances not assumed			-6.842	54.451	.000	-10.03	1.47	-12.97	-7.09
Self-efficacy	Equal variances assumed	15.634	.187	-10.534	58	.000	-15.43	1.47	-18.37	-12.50
	Equal variances not assumed			-10.534	43.120	.000	-15.43	1.47	-18.39	-12.48
Attitudes towards Teaching	Equal variances assumed	3.330	.073	-1.612	58	.002	-2.53	1.57	-5.68	-.61
	Equal variances not assumed			-1.612	56.234	.002	-2.53	1.57	-5.68	-.61
Classroom Affectivity	Equal variances assumed	6.591	.313	-6.651	58	.031	-6.57	.99	-8.54	-4.59
	Equal variances not assumed			-6.651	47.215	.031	-6.57	.99	-8.55	-4.58
Resilience	Equal variances assumed	3.358	.272	1.241	58	.019	1.07	.86	.65	2.79
	Equal variances not assumed			1.241	54.584	.020	1.07	.86	.66	2.79
Burnout	Equal variances assumed	1.887	.175	-1.556	58	.025	-1.67	1.07	-3.81	-.48
	Equal variances not assumed			-1.556	55.572	.025	-1.67	1.07	-3.81	-.48
Coping	Equal variances assumed	6.016	.417	-3.326	58	.012	-2.83	.85	-4.54	-1.13
	Equal variances not assumed			-3.326	52.924	.012	-2.83	.85	-4.54	-1.12
Sum Teacher Immunity	Equal variances assumed	37.760	.550	-7.897	58	.000	-38.00	4.81	-47.63	-28.37
	Equal variances not assumed			-7.897	39.324	.000	-38.00	4.81	-47.73	-28.27

As can be perceived from Table 4, the significance value in Levenes' test for openness to change were (p= .260>.05), self-efficacy (p=.187>.05), attitudes towards teaching (p= .073>.05), classroom affectivity (p= .313>.05), resilience (p= .272), burnout (p= .175>.05), coping (p= .417> .05) and teacher immunity (p= .550> .05). It was disclosed that there were significant differences between the private and public-school teachers' immunity and its factors since for openness to change (t(58)= -6.842, p= .000), self-efficacy (t(58)= -10.534, p= .000), attitudes towards teaching (t(58)= -1.612, p= .002), classroom affectivity (t(58)= -6.651, p= .031), resilience (t(58)= 1.241, p= .019), burnout (t(58)= -1.556, p= .025), coping (t(58)= -3.326, p= .012) and sum teacher's immunity (t(58)= -7.897, p= .000) were smaller than .05. So that the null hypothesis that stated there are not significant differences between private and public-school teachers' immunity was rejected and the first research question was positively answered.

4.3 The Relationship between Iranian EFL Teachers' Immunity and Their Role Overload

The second research question dealt with the significant relationship between Iranian EFL teachers' immunity and role overload. Employing the Pearson-product moment correlation procedure requires the necessity of two assumptions of normality and linearity. So as to safeguard the normality distribution of teachers' immunity and their role overload scores, the researchers utilized One-sample kolmogorov-smirnov as well as Shapiro-wilk tests. The results of the Normality are elucidated in Table 5.

Table 5

The Normality Distribution Tests for Iranian EFL Teachers' Immunity and Their Role Overload Scores

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Sum Teacher Immunity	.195	60	.156	.902	60	.125
Role Overload	.062	60	.200*	.983	60	.583

a. Lilliefors Significance Correction
*. This is a lower bound of the true significance.

As it is illustrated in Table 5, the p-values in the One-Sample Kolmogorov Smirnov test were .156 and .200 for teachers' immunity and

their role overload scores were higher than alpha level .05, demonstrating that the research data held a normal distribution. In this way, the normality assumption was fulfilled. Moreover, in order to determine whether the relationship between Iranian EFL teachers' immunity and their role overload scores was linear, the researchers utilized a Scatter plot. Figure 1 displays the results of this test.

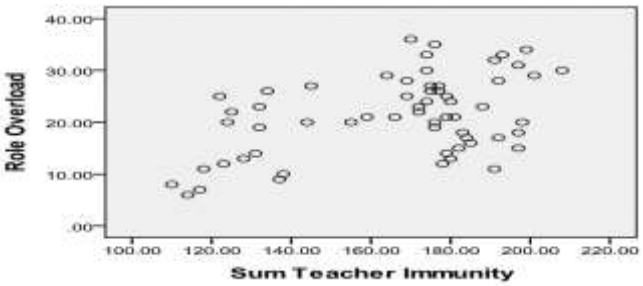

Figure 1. Linearity assumptions for Iranian EFL teachers' immunity and their role overload

As indicated in Figure 1, there was no straight line between Iranian EFL teachers' immunity and their role overload. So, the linearity assumption was not met. However, to make sure that there is no important relationship between Iranian EFL teachers' immunity and role overload, nonparametric test of Spearman's Rank Order (Rho) correlation was applied since the assumption of linearity was violated. Table 6 presents the results of the Spearman Rho.

Table 6
Spearman-Rank Order Correlation (Rho) for Iranian EFL Teachers' Immunity and Their Role Overload

			Sum Teacher Immunity	Role Overload
Spearman's rho	Sum Teacher Immunity	Correlation Coefficient	1.000	-.313*
		Sig. (2-tailed)	.	.015
		N	60	60
	Role Overload	Correlation Coefficient	-.313*	1.000
		Sig. (2-tailed)	.015	.

Regarding the results of Table 6, it was revealed that there was a significant moderate and negative correlation (r= -.313, p=.015<.05) between

Iranian EFL teachers' immunity and their role overload according to the Cohen's (1988) guidelines. Thus, the second null hypothesis was rejected and the second research question was positively answered.

4.4 The Relationship between Iranian EFL Teachers' Immunity and Their Job Stress

The third research question dealt with the significant relationship between Iranian EFL teachers' immunity and their job stress.

To ensure the normality of the distribution of Iranian EFL teachers' immunity and their job stress scores, the researchers employed One-sample Kolmogorov-Smirnov and Shapiro-Wilk tests. Table 7 demonstrates the results of this test.

Table 7
Normality Tests for Iranian EFL Teachers' Immunity and Their Job Stress Scores

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Sum Teacher Immunity	.195	60	.156	.902	60	.125
Job Stress	.063	60	.200*	.958	60	.339

a. Lilliefors Significance Correction
*. This is a lower bound of the true significance.

As it is illustrated in Table 7, the p-values in the One sample Kolmogorov Smirnov test, .156 and .200 for teachers' immunity and their job stress scores were higher than alpha level .05, representing that the research data had a normal distribution. Consequently, the normality assumption was fulfilled. Furthermore, to determine whether the relationship between Iranian EFL teachers' immunity and their job stress was linear, the researchers utilized a scatter plot. The results are demonstrated in Figure 2.

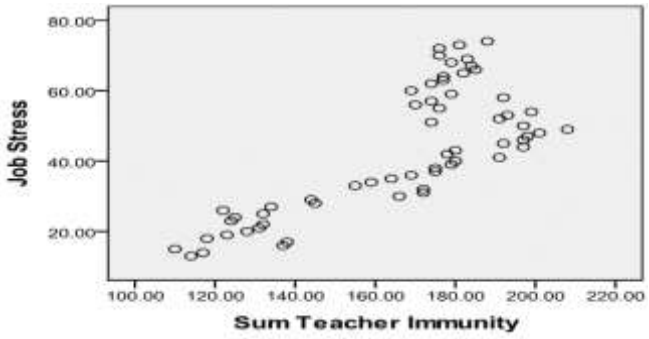

Figure 2. Linearity assumptions for Iranian EFL teachers' immunity and their job stress scores

As illustrated in Figure 2, the scatter plot shows no straight line between Iranian EFL teachers' immunity and their job stress. This means that the linearity assumption was violated. On the other hand, the Spearman's Rank Order (Rho) correlation was utilized to make sure that there was not any major relationship between Iranian EFL teachers' immunity and their job stress since the linearity assumption was violated. Table 8 displays the results of Spearman Rank Order (Rho) correlation.

Table 8
Spearman Rank Order (Rho) Correlation for Iranian EFL Teachers' Immunity and Their Job Stress Scores

			Sum Teacher Immunity	Job Stress
Spearman's rho	Sum Teacher Immunity	Correlation Coefficient	1.000	-.730**
		Sig. (2-tailed)	.	.000
		N	60	60
	Job Stress	Correlation Coefficient	-.730**	1.000
		Sig. (2-tailed)	.000	.
		N	60	60

The results depicted from Table 8 shows that with reference to the Cohen's (1988) guideline, there was a significant robust and negative relationship (r= -.730, P=.000< .05) between Iranian EFL teachers' immunity and their job stress. Therefore, the third null hypothesis was rejected and the third research question was positively answered.

5. Discussion

The present study intended to examine the differences between public-school and private institute EFL teachers' immunity. The other goal of this study was to see whether there are any relationships between role overload, job stress, and teacher immunity. The data was analyzed in the previous section and the research questions were answered. In this section, the findings of the current research are going to be compared with other studies related to teacher immunity. Suggestions, implications, recommendations for further research, limitations of this study, and finally the study's conclusions are included in the final section.

The findings of the present research are in line with Hiver's (2017) view that teacher immunity is a situation-specific construct instead of being a natural trait and it develops in response to contextual adversities that teachers face in their workplaces.

The results support the argument by Haji Jalili, Sepehri and Shafiee (2023) that teacher immunity is not an inner feeling and environmental factors give teachers the sense of immunity and they play no part in it. Another common finding in these two studies was the low level of immunity in private institutes.

Pourbahman, and Sadeghi's (2020) findings are different from the current study's findings in that the immunity of public-school teachers were lower than private school teachers, but in the current study public-school teachers experience higher levels of immunity in this context. These researchers mentioned that teaching is a stressful job. The view that stress related to teaching may lower teacher immunity resembles this study's findings. As is mentioned in the previous section, occupational stress has a significant strong and negative correlation with teacher immunity.

The findings are also in line with the findings of a study (Rahimpour et al. 2020; Khalili et al., 2024) that was carried out in two contexts, namely private institutes, and public-schools in Iran. English language teachers in public-schools feel secure in their jobs for they are supported by the government, and they have good contracts, but the teachers who work in private sectors suffer from low levels of immunity because of their short-term contracts. In the current study the findings also demonstrated that public-school teachers are equipped with higher levels of immunity as opposed to private institute teachers. Teachers' job insecurity, personality traits, and reflective teaching were investigated in relation to immunity in these researchers' study which were not done in our study.

5.1 Pedagogical implications

The findings of this current study revealed that Iranian EFL teachers in all educational contexts should be introduced to the concept of teacher immunity and learn how to protect themselves from challenges and perturbations of their educational contexts. Researchers working in the fields of teacher education and the production of instructional material can benefit from this study's findings. Teacher education courses need to be revised and updated to have a self-awareness component. By encouraging teachers to develop stress management strategies, they can deal with their emotional crisis. With these strategies, burnout among teachers might be avoided. In addition to the subject-matter expertise that teachers should gain throughout their careers, it is recommended that they be inspired to develop the skills necessary for them to make wise decisions in all of the pivotal situations that arise in actual classrooms. They should also be motivated to enhance their teaching by thinking back concerning their experiences, longing for self-development, and engaging in activities instead of staying away from risks. Additionally, stressors such as lack of appropriate materials and facilities are not entirely

under the control of instructors, as a result responsible parties need to pay attention to this problem in order to create an environment that fosters teachers' development and leads to better learning. In other words, teachers require the assistance of all parties concerned to enhance adaptive immunity. Education authorities must take into account the measures that have a significant impact on inspiring teachers, these interventions cannot be put into place immediately. Instead, these actions should be consistent in order to move towards establishing a more positive immunity. It is thought that to have a further successful professional life that is more open to criticism and progress, teachers must first identify the triggering disturbances in their career, reflect on them, and attempt to find appropriate coping mechanisms. Without the proper direction, these triggering disturbances will result in maladaptive immunity (Hiver, 2015).

According to the outcomes of this study, in order to enhance the standards of instruction in schools and institutions, it is advised that the school administrators assign balanced workloads and regularly monitor the teachers' workload. In every educational context, they should make sure that proper job assignments are implemented. Alternately, educators ought to be aware that teaching is a challenging profession, in order to reduce stress, they must always be patient.

It is obvious that a teacher's emotions and psychology play a significant role in education and that these aspects as well as many other factors have an impact on their performance. Teachers need to be taught and psychologically get ready to handle such challenges because teaching is a tough and stressful profession. They can benefit from this area of research by becoming more aware of the demands of teaching as well as the fact that this line of work is well known for its emotional challenges, difficulties, and stress (Derakhshan, 2021).

5.2 Conclusion

This study aimed to explore whether there are any differences between teachers' immunity in private institutes and public-schools. The second goal was to see whether there are any relationships between role overload and teacher immunity. The third objective was to see if there are any possible relationships between job stress and teacher immunity. Teacher immunity questionnaire, job stress questionnaire, and role overload questionnaire were distributed among 60 participants who were teachers from both contexts. The data were analyzed employing different types of statistics. The results revealed that the private school teachers' immunity and its subcomponents are different from public-school teachers' immunity and its subcomponents. A negative correlation was seen between role overload and teacher immunity, which means that higher levels of role overload result in lower and more negative teacher immunity. There was also a negative relationship between teacher immunity and job stress. What this means is that higher degrees of job stress result in teachers experiencing lower degrees of teacher immunity.

References

Alghamdi, N. (2017). Role Overload and Job Stress among the Female University Teachers- Saudi Context. *European Online Journal of Natural and Social Sciences*, *6(2),* pp. 288-295. Retrieved from https://european-science.com/eojnss/article/view/5117

Boyd, S., & Wylie, C. (1994). *Workload and stress in New Zealand universities*. Wellington: New Zealand Council for Educational Research and the Association of University Staff of New Zealand.

Brown, H. D. (2000). *Principles of Language Learning and Teaching*. Longman.

Bryman, A., & Bell, E. (2007). Business research methods (2nd ed.). *Oxford University Press.*

Bullough, R. (2005). Teacher vulnerability and teachability: A case study of a mentor and two interns. *Teacher Education Quarterly*, *32(2),* 23–40.

Chiappelli, F., & Hodgson, D. (2000). Immune suppression. In G. Fink (Ed.), *Encyclopedia of stress* (pp. 531–535). San Diego, CA: Academic Press.

Chiappelli, F., & Liu, Q. N. (2000). Immunity. In G. Fink (Ed.), *Encyclopedia of stress* (pp. 541–546). San Diego, CA: Academic Press.

Compas, B. E., Connor-Smith, J. K., Saltzman, H., Thomsen, A. H., & Wadsworth, M. E. (2001). Coping with stress during childhood and adolescence: problems, progress, and potential in theory and research. *Psychological bulletin*, *127*(1), 87–127.

Dekker, S., Cilliers, P., & Hofmeyr, J. H. (2011). The complexity of failure: implications of complexity theory for safety investigations. *Safety Science*, *49*, 939–945.

Derakhshan, A., Greenier, V., & Fathi, J. (2022). Exploring the interplay between a loving pedagogy, creativity, and work engagement among EFL/ESL teachers. *Journal of Language Teaching and Research, 13(*1*),* 1-10.

Dobakhti, L., & Khalili, A. (2024). A contributory study of the factors in British and Iranian English instructors' teacher immunity. *Applied Research on English Language*, *13*(2), 125-148.

Dua, J. K. (1994). Job stressors and their effects on physical health, emotional health and job satisfaction in a university. *Journal of Educational Administration, 32*, 58-78.

Greenglass, E. (2000). Teaching and stress. In G. Fink (Ed.), *Encyclopedia of stress* (pp. 571–574). Academic Press.

Greenier, V., Derakhshan, A. & Fathi, J. (2021). Emotion regulation and psychological well-being in teacher work engagement: A case of British and Iranian English language teachers. *System* 97: 102446. doi:10.1016/j.system.*2020*.102446.

Groff, J., & Mouza, C. (2008). A Framework for Addressing Challenges to Classroom Technology Use. AACE Journal. 16. 21-46.

Gu, Q., & Day, C. (2007). Teachers' resilience: A necessary condition for effectiveness. *Teaching and Teacher Education*, *23*, 1302–1316.

Haken, H. (1997). Visions of synergetics. *Journal of the Franklin Institute, 334(5-6),* 883-907.

Haseli Songhori, M., Ghonsooly, B. & Afraz, S. (2018). Language teacher immunity among Iranian EFL teachers: A self-organization perspective. *Iranian Journal of English for Academic Purposes*, *7(1),* 128-143.

Hiver, P. (2015). Once burned, twice shy: The dynamic development of system immunity in teachers. In Z. Dörnyei, P. MacIntyre, & A. Henry (Eds.), *Motivational dynamics in language learning* (pp. 214-237). Bristol: Multilingual Matters.

Hiver, P. (2016). The triumph over experience: Hope and hardiness in novice L2 teachers. In P. MacIntyre, T. Gregersen, & S. Mercer (Eds.), *Positive psychology in SLA* (pp. 168-192). Bristol: 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.

Hiver, P. (2018). Teach strong: The power of teacher resilience for L2 practitioners. In S. Mercer, & A. Kostoulas (Eds.), *Language teacher psychology* (pp. 231-246). Bristol: Multilingual Matters.

Hiver, P., & Dörnyei, Z. (2017). Language teacher immunity: A double-edged sword. *Applied Linguistics, 38(3),* 405-423.

Holland, J. H. (2012). *Signals and boundaries: Building blocks for complex adaptive systems*. Cambridge, MA: MIT Press.

Ivancevich, J. M., Matteson, M. T., & Preston, C. (1982). Occupational stress, type a behavior, and physical well-being. *Academy of Management Journal, 25,* 2, 373-391.

Jalili, M., Sepehri, M., & Shafiee, S. (2023). Teacher immunity in English language institutes and public-schools: EFL teachers' perception in focus. *International Journal of Foreign Language Teaching and Research*, 9(1), 1-16.

Jamal, M. (2004). Burnout, stress and health of employees on non-standard work schedules: A study of Canadian workers. *Stress and Health*, *20*, 113–119.

Jendle, H, & Wallnäs, A. (2017). Effects of exercise, social support and hardiness on occupational stress in Swedish teachers. Retrieved from http://www.diva portal.org/smash/get/diva2:1120081/FULLTEXT01.pdf

Jomuad, P. D., Antiquina, L. M. M., Cericos, E. U., Bacus, J. A., Vallejo, J. H., Dionio, B. B., Bazar, J. S., Cocolan, J. V., & Clarin, A. S. (2021). Teachers' workload in relation to burnout and work performance. *International Journal of Educational Policy Research and Review, 8(2),* 48-53.

Kahn, Robert L., Wolf, D. M., Quinn, R. P., Snoek, J. D., & Rosenthal, R. A. (1964). Organizational stress. New York: John Wiley & Sons.

Kashef, S. H., & Khalili, A. (2023). Perspective chapter: English for academic purposes teacher education: Prerequisites, predicaments, and perquisites. In Ortega-Sánchez, D. (Ed.), *Education Annual Volume* (pp. 299-309). IntechOpen. https://doi.org/10.5772/intechopen.112400

Kauffman, S. (1995). *At home in the universe: The search for the laws of self-organization and complexity*. OUP.

Khalili, A., Dobakhti, L. & Zohrabi, M. (2024). Scrutinizing the factors in native and non-native English instructors' teacher immunity. *Journal of Research in Applied Linguistics*, *15*(1), 1-16.

Khalili, A., Kashef, S. H., & Khalili, F. (2022). Interlinking corrective feedback with EAP writing instruction: An advantageous endeavor? *ESP Today*, *10*(2), 286-309.

Khalili, A., & Zohrabi, M. (2024). Predictors of New Zealander and Iranian English teachers' productive and maladaptive teacher immunity. *Journal of Language Horizons*. doi: 10.22051/lghor.2024.46117.1892

Khalili, A., Zohrabi, M., Dobakhti, L., & Gholami, J. (2024). Convenience editing in medical sciences: Professional expertise vis-à-vis linguistic virtuosity. *Language Related Research*, *15*(5), 347-368.

Larsen-Freeman, D. (2012). Complex dynamic systems: A new transdisciplinary theme for applied linguistics? *Language Teaching*, *45*, 202–214.

Larsen-Freeman, D. (2013). Complexity theory: A new way to think. Revista Brasileira *de Linguistica Aplicada*, *13*, 369–373.

Lazarus, R. S. (1990). Theory-based stress measurement. *Psychological Inquiry*, *1*, 3-13.

Lundberg, U. (2000). Workplace stress. In G. Fink (Ed.), *Encyclopedia of stress* (pp. 684–692). San Diego, CA: Academic Press.

Mackey, A., & Gass, S. M. (2005). *Second language research: Methodology and design.* London: Lawrence Erlbaum Association.

Maier, S., Watkins, L., & Fleshner, M. (1994). Psychoneuroimmunology: The interface between behavior, brain, and immunity. *American Psychologist*, *49*, 1004–1017.

Marks, Stephen R. (1977), Multiple roles and role strain: Some notes on human energy, time and commitment. *American Sociological Review*, *42*, 921-36.

Maslach, C., & Leiter, M. (2008). Early predictors of job burnout and engagement. *Journal of Applied Psychology*, *93*, 498–512.

McAdams, D. (2006). The role of narrative in personality psychology today. Narrative Inquiry, *16*, 11–18.

McAdams, D. (2008). Personal narratives and the life story. In O.P. John, R.W. Robins, & L.A. Pervin (Eds.), *Handbook of personality theory & research* (3rd ed.) (pp. 242–262). New York, NY: Guilford.

McAdams, D., & Pals, J. (2006). A new big five: Fundamental principles for an integrative science of personality. *American Psychologist*, *61*, 204–217.

Merton, R. F. (1957). Social theory and social structure. New York: Free Press.

Mohammadnia, Z., & Khalili, A. (2014). An investigation of the differential effects of visual input enhancement on the vocabulary learning of Iranian EFL learners. *International Journal of Applied Linguistics and English Literature*, *3*(4), 69-79.

Morrison, K. (2012). Searching for causality in the wrong places. *International Journal of Social Research Methodology, 15*, 15–30.

Northrop, R. (2011). *Introduction to complexity and complex systems*. Boca Raton, FL: CRC Press.

Nowotny, H. (2005). The increase of complexity and its reduction: Emergent interfaces between the natural sciences, humanities and social sciences. *Theory, Culture and Society, 22(5)*, 15–31.

Pancer, Z., & Cooper, M. (2006). The evolution of adaptive immunity. *Annual Review of Immunology, 24*, 497–518.

Parker, D. F. & Decotiis, T. A. (1983). Organizational determinants of job stress. *Organizational Behavior and Human Performance*, *32*, 160-177.

Pearce, J., & Morrison, C. (2011). Teacher identity and early career resilience: Exploring the links. *Australian Journal of Teacher Education*, *36*, 48–59.

Pourbahman, R., & Sadeghi, K. (2020). English as a foreign language teachers' immunity and motivation: Public-schools vs. private institutes. *Teaching English Language, 14(2)*, 291-32.

Rahimpour, H., Amirian, S.M., Adel, S.M., & Zareian, G. (2020). A model of the factors predicting English language teacher immunity: A path analysis. *Indonesian Journal of Applied Linguistics*.

Reilly, M. D. (1982). Working wives and convenience consumption. *Journal of Consumer Research*, *8*, 407-418.

Selye, H. (1976). *The stress of life* (2nd ed.). McGraw-Hill.

Thiagarajan, P., Chakrabarty, S., & Taylor, R. D. (2006). A confirmatory factor analysis of Reilly's role overload scale. Educ. *Psychol. Meas. 66*, 657–666. Doi:10.1177/0013164405282452

Vanishree, P. (2014). Impact of role ambiguity, role conflict and role overload on job stress in small and medium scale industries. *Journal of Management Science, 3(1)*, 10-13.

Voydanoff, P. (2002). Linkages between the work-family interface and work, family, and individual outcomes. *Journal of Family Issues, 23*, 138-164.

Wu, J. H., Tennyson, R. D., & Hsia, T. L. (2010). A study of student satisfaction in a blended e-learning system environment. *Computers & Education*, 55(1), 155-164. 5.