

Language Teacher Immunity among Iranian EFL Teachers: A Self-Organization Perspective

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Abstract

As a novel concept in language teacher psychology, language teacher immunity, either in its productive or maladaptive manifestation, is a strong indicator of how teachers behave and respond in the face of adversity and disturbances and it has a profound effect on teachers' career. Research on language teacher immunity is in its nascent stage. This study tried to fill the gap in the existing literature by using a mixed-methods approach to find out what type of language teacher immunity was dominant among Iranian English teachers and how these teachers might have developed their immunity type. For the quantitative part of the study a questionnaire was distributed among 230 English teachers to find out their dominant immunity type. In the qualitative part of the study a series of semi-structured, one-on-one interviews with 13 seasoned English teachers were conducted in order to find out the developmental pathways of teacher immunity. The findings of the two-step cluster analysis of the questionnaire data indicated that maladaptive immunity was a dominant type of immunity among Iranian English teachers since their mean scores on six out of seven questionnaire scales were low. Also, the results of the directed content analysis of the interviews revealed that Iranian English teachers followed the four stages of self-organization, namely, triggering, coupling, realignment, and stabilization in forming their immunity. Further results and their implications for educational policy makers and teacher educators are discussed.

Keywords: Language Teacher Immunity, Teacher Motivation; Iranian English Teachers; Self-organization; Teacher Stress

1. Introduction

In any educational system, many factors are influential in educating the future generation of a society. Teachers as the "architects of society" (Hiver & Dörnyei, 2017, p. 405) are the "critical pillars" (Khani & Mirzaee, 2014, p. 1) and the most determinants of students' learning (Maulana, Opendakker, & Bosker, 2016). They not only impart to their students' knowledge and skills, but also their own personal traits, mental states, and behavior, all related to teachers' psychology. Thus, their job as a human service occupation (Skinner & Beers, 2016) is pivotal in shaping a(n) healthy future society.

In their recent book chapter, Mercer, Oberdorfer and Saleem (2016) and Sampson (2016) claim that over the past half a century "learner-centered" approaches have focused on learners, their psychology, behavior, and wellbeing, but it may be time for more of a "teacher-centered" approach in the field of English as a second/foreign language teacher psychology. Mercer, et al. (2016) voice their concern in regard to underdeveloped areas and clear gaps that exist in teachers' psychology. For this reason, and since investigating language teachers' psychology is in its infancy (Hiver & Dörnyei, 2017), it has given rise to the emergence of new concepts and constructs. One of these

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novel constructs is language teacher immunity (Hiver, 2015b; Hiver, 2017; Hiver & Dörnyei, 2017). Language teacher immunity is a powerful factor in determining how teachers behave and respond (Hiver, 2015b) in the face of multitude sources of stress they encounter in their profession (Skinner & Beers, 2016; Carton & Fruchart, 2014). In stressful and adverse conditions, this immunity can take on two major forms: productive (positive) and maladaptive (negative). Productive immunity imbues teachers with hope, enthusiasm, commitment, resilience, and motivation, whereas maladaptive immunity results in callousness, apathy, conservatism, cynicism, and emotional and physical exhaustion (Hiver, 2015b; Hiver & Dörnyei, 2017). Research on language teacher immunity is in its nascent stage and it needs to be fine-tuned by further investigation (Hiver, 2016b). This study, then, endeavors to find out the dominant type of teacher immunity, either productive or maladaptive, among Iranian English teachers and to delve into the immunization process of English language teachers in Iranian EFL context and fill the gap in the existing literature on teacher psychology, in general, and language teacher immunity, in particular. To the best knowledge of the researchers and due to the newness of the concept of language teacher immunity, no research has been conducted to discover the dominant immunity type and to investigate the developmental process of English teachers' immunity in Iran.

2. Literature Review

2.1. A Brief Look at Language Teacher Immunity

Language teacher immunity is a robust armoring system that emerges in response to adverse conditions (Hiver, 2018) and ensures the survival of a system (Hiver, 2015b), here a language teacher. The concept of teacher immunity puts forward a framework that elucidates the processes through which teachers in general, and language teachers in particular, attempt to come up with a defense mechanism so as to buffer or assuage the effects of unpleasant disturbances that might threaten their motivation to teach and their professional identity (Hiver & Dörnyei, 2017; Hiver, 2016b).

The metaphor of teacher immunity is derived from biological immunity and has two global manifestations: productive (positive) and maladaptive (negative) (Hiver, 2015b). Teacher immunity, in its productive or maladaptive representations, homes in on how teachers succeed in or fail to deal with and overcome multiple adversities in their classroom and even school setting. Hiver (2016b) conducted a four-phase study to explore psychological qualities which distinguished motivated, committed, innovative, and productive teachers from those who were demotivated and struggling to survive. In the first phase of the study which was an exploratory case study, by interviewing four South Korean EFL teachers, Hiver (2015b) tried to investigate the motivational trajectories of these teachers and their outcomes in response to adversities they faced in their classroom practices. His findings were suggestive of a process that these participants went through to develop a unique emergent outcome, termed *teacher immunity*, which functioned as a buffer against the disturbances that the participating teachers experienced in their teaching.

In the remaining three validating phases, Hiver (2016b) used retrodictive qualitative modeling. This new research method "reverses the usual research direction by starting at the end – the system outcomes – and then tracing back to see why certain components of the system ended up with one outcome option and not another" (Dörnyei, 2014, p. 80). In the second phase, in order to identify the language teacher immunity prototypes, Hiver interviewed 44 language teachers in focus groups. The findings of the second phase initially came up with four global classifications: productively immunized, maladaptively immunized, partially immunized, and immunocompromised. In phase three, data obtained through a teacher immunity survey from 293 language teachers triangulated the second phase. The results of cluster analysis identified six language teacher immunity archetypes: the *spark-plug*, and the *visionary* (productively immunized), the *sell-out*, and the *fossilized* (maladaptively immunized), the *over-compensator*, (partially immunized), and finally the *defeated* (immunocompromised). Finally, in phase four, three teachers in each archetype were interviewed to gain a clear insight into the developmental trajectory of each

given archetype. The cumulative findings of these four stages are indicative of the fact that "language teacher immunity plays a significant role in L2 teachers' professional identity and affects how L2 practitioners position themselves in the profession through their accompanying mindsets . Considering the tremendous impact language teacher immunity has on teachers' daily classroom teaching and their motivation and professional identity, the aim of this study is firstly to identify which type of immunity is the most dominant among Iranian English teachers, and secondly to gain a vivid understanding of how Iranian EFL teachers develop a productive or maladaptive immunity during their teaching careers. Based on what was reviewed and discussed above, this mixed-methods study aimed to find the answers to the following research questions:

Research Question 1: Which type of immunity is dominant among Iranian English teachers?

Research Question 2: What stages do Iranian EFL teachers go through to develop their language teacher immunity?

2.2. Theoretical Framework

Language teacher immunity can be considered as a useful construct in offering more insight into teacher's cognition, experiences, and identities (Hiver & Dörnyei, 2017) and since it "affects almost everything that teachers do in their careers (Hiver, 2015b, p.226), understanding the mechanisms through which this immunity takes shape is crucial. The present study aims at discovering the developmental process of teacher immunity among Iranian EFL teachers by adopting the framework of self-organization and emergence (Hensley, 2010, Hiver, 2015b; Hiver & Dörnyei, 2017). Self-organization and emergence are adaptive and developmental concepts derived from complexity theory (CT) (Larsen-Freeman, 2012; Larsen-Freeman, & Cameron, 2008; Kostoulas, Stelma, Mercer, Cameron, & Dawson, 2017). According to Hiver (2015b), self-organization is a robust general process (Hiver & Al-Hoorie, 2016) through which the internal structure or overall function of a dynamic system changes via interaction of the parts of that system (Larsen-Freeman, 2012). When dynamic systems are subjected to some external circumstances (Hiver, 2015b), their components are thrown into disarray, enabling them to spontaneously reorganize their various parts into novel configurations (Hiver & Dörnyei, 2017). This new outcome is called *emergence* (Hiver, 2015b; Larsen-Freeman, 2012; Mahmoodzadeh & Gkonou, 2015).

The process of self-organization and emergence is comprised of four stages that are evidence of "motivation-sustaining teacher immunity" (Sampson, 2016, p. 296). These four stages proposed by Hiver (2015b, 2016b) and Hiver and Dörnyei (2017) are: 1) *triggering* (a system's destabilization and disruption in its functions due to some disturbances), 2) *coupling* (the reformulation of the system's components to cope with the disturbances), 3) *re-alignment* (the system's returning to equilibrium through the "symbiotic relationship developed between the disturbances and explicit response options" (Hiver & Dörnyei, 2017, p. 413)), and 4) *stabilization* (the transformation of the system into a "new meta-component that buffers the system from future disturbances" (Hiver, 2015b, p. 217)). To date, only one theoretical study (Hiver & Dörnyei, 2017) and two empirical studies (Hiver, 2015b, 2017) have proposed and investigated the concept of language teacher immunity. Consequently, it cannot be claimed that all language teachers follow these four stages. Nor can the idea that some teachers skip a stage or never make it to a certain stage be rejected. Therefore, one subsidiary purpose of this study is to find out whether language teachers go through all the stages or skip some during their immunization process.

3. Methodology

3.1. Context

In Iran educational decision-making, designing the curriculum, textbook writing and selection, and teacher recruitment and training, including English language teachers, take place under the direct supervision of the Ministry of Education and the Ministry of Science, Research, and Technology. Before 2012, different teacher training centers were responsible for training teachers. In 2012, a

teacher training university, called Farhangian University, was founded to be the only university to offer teacher training programs across Iran (Kuusisto, Gholami, & Tirri, 2016). Pre-service teacher training programs normally last for four years after which the graduates receive their Bachelor's degree and shortly after graduation, they commence their teaching at different schools. The mandatory workload of Iranian teachers is 24 hours per week and their monthly salary is between \$400 and \$500 (Soodmand Afshar & Doosti, 2015). Teachers' low remuneration forces them to have a second job, the consequence of which is the decline in teachers' social status. Due to this, a sense of dissatisfaction and lack of motivation prevails among teachers. But most of the teachers stick to their careers for intrinsic reasons such as having a positive internal feeling toward imparting knowledge and helping others learn, and feeling internally satisfied with serving the society (Soodmand Afshar & Doosti, 2016).

3.2. Questionnaire Participants

For the quantitative part of the study, a total of 230 participants took part in completing a teacher immunity questionnaire. These participants were recruited through convenient sampling and were high school English teachers who were teaching at state-run schools in two southeastern cities of Zahedan and Kerman, Iran. Of this sample, 140 (60.9%) of the participants were female and 90 (39.1%) were male. Moreover, 39 (16.9%) participants had 3-7 years of teaching experience; 50 (21.7%) had 8-10 years of teaching experience; 52 (22.6%) had 11-15 years of teaching experience; 29 (12.6%) had 16-19 years of teaching experience and 60 (26.1%) had over 20 years of teaching experience.

3.3. Interview Participants

Through convenient sampling, 25 participants were asked to take part in the follow-up interview regarding the stages that English teachers might have gone through to form their immunity. Out of these 25 participants, 13 agreed to be interviewed. They ranged in age from 31 to 53 years old (average 40.85). Eight of the participants were male and five were female. All the participants were seasoned English language teachers (6 years to 30 years of experience) who were quite familiar with the high school settings and the motivating, demotivating, and stress-causing factors and the coping strategies that teachers use to deal with these factors.

3.4. Instruments

The data for the quantitative part of the study were collected through a teacher immunity questionnaire developed by Hiver (2016). This questionnaire includes two parts. The first part gathers participants' demographic information such as their gender, age, and years of experience in teaching. The second part comprises 42 Likert-scale items related to 7 scales each with a 7-point response scale ranging from Strongly Disagree (=1) to Strongly Agree (=7). The scales include: *Teaching self-efficacy* measured teachers' perceived self-efficacy by means of 7 items. Cronbach's alpha for the scale was 0.79. *Resilience* demonstrated teachers' capacity to positively negotiate stressors and adversities in their life and career. This scale was comprised of 6 items. Cronbach's alpha for the scale was 0.81. *Coping* dealt with teachers' actual handling of stressors on the ground in real time. This scale included 6 items. Cronbach's alpha for the scale was 0.77. *Burnout* which is a chronic syndrome such as exhaustion as a result of prolonged stressors at work was measured through 5 items. Cronbach's alpha for the scale was 0.80. *Attitudes toward teaching* measured how teachers felt about teaching. This scale comprised 5 items. Cronbach's alpha for the scale was 0.79. *Openness to change*, a 6-item scale, measured teachers' inclination towards adopting novelty and change in their teaching. Cronbach's alpha for the scale was 0.75. And *Classroom affectivity* which measured teachers' emotional states in their teaching practices. This scale had 7 items. Cronbach's alpha for the scale was 0.85. The questionnaire was translated into Persian by the first researcher, and this translated version was then back-translated by two professional translators working at a university. The back-translation was done to "ensure the equivalence of the two versions" (Dörnyei & Taguchi, 2009, p. 51).

For the qualitative part of the study an interview protocol was designed to be used as a guide during the interviews. In the meantime, the participants' answers made the interviewer ask some probing questions (Hatch, 2002) that "prompted the respondents to elaborate on certain points and give concrete examples" (Low, Ng, Hui, & Cai, 2017, p. 35). The interview protocol covered two general sections. In the first section questions were asked which were directly related to each interviewee's personal experiences as an English teacher. The second section asked questions which pertained to English teachers in general. The reason for designing these two sections was that most of the participants, when informed about the concept of teacher immunity, tried to show that they had developed positive immunity and most other teachers' maladaptive one. This is clearly evident in what Hiver (2016b) states: "... teachers were not only familiar with the idea of teacher immunity, but they were surprisingly quick and happy to nominate people to whom this applied—very rarely to themselves" (p. 260). These paradoxes in teachers' ideas are called *mute zones* [emphasis added] (Guimelli & Deschamps, 2002, cited in Pelini, 2016). According to Pelini (2016), "mute zones are representations that are not spontaneously expressed by subjects interviewed under normal conditions" (p. 6).

3.5. Procedures

The final Persian questionnaire was administered during the in-service teacher education sessions that were held in two cities of Zahedan and Kerman. Many English teachers participated in these sessions and it was the best time to collect the quantitative data. 254 teachers filled in and returned the questionnaires. Out of these 254 filled-in questionnaires, 24 were incomplete and were excluded in the final analysis of the data. For the qualitative phase of the study, in-depth semi-structured interviews with the English language teachers were the sources of data. The first researcher conducted all the interviews either at the university where he teaches or at the schools where the participants taught. The interviews were conducted in Persian to ensure that the participants felt comfortable in discussing their experiences and expressing their feelings in their mother tongue. Each interview lasted between 25 to 40 min. Before each interview, the interviewer explained the purpose of the study to the interviewees and they signed the ethics sheet that indicated their voluntary participation and confidentiality of their interview data. The interview proceeded in a way to lead the participants to reflect upon and talk about the four stages of immunity development, namely, triggering, coupling, realignment, and stabilization stages. The interviews were audio-recorded with a smartphone using Easy Voice Recorder (version 1.8.1). The interviews, then, were transcribed verbatim and used for data analysis.

3.6. Data Analysis

Data collected from the questionnaires were analyzed using SPSS 22. To analyze the data cluster analysis was run. Cluster analysis has several types and for the purpose of this study a two-step cluster analysis was utilized because this method of analysis is "one-pass-through-the-data approach" (Satish & Bharadhwaj, 2010, p. 10) and appropriate when dealing with both continuous and categorical data (Chan & Leung, 2015). In order to run the analysis, clustering variables and the evaluation fields were first specified. The five scales, namely, teaching self-efficacy, resilience, attitudes toward teaching, openness to change, and classroom affectivity were clustering variables that were used as the highest predictor importance. Coping and burnout scales served as criterion variables.

The analysis of the qualitative data followed the principles of directed content analysis (Hsieh & Shannon, 2005) with the assistance of MAXQDA 12 software. Directed content analysis is appropriate to use when "existing theory or prior research about a phenomenon that is incomplete or would benefit from further description," with the goal "to validate or extend conceptually a theoretical framework or theory" (Hsieh & Shannon, 2005, p.1281).

Before generating the "first cycle coding" (Saldaña, 2009, p.3), the first step in qualitative data analysis is data immersion phase. In directed content analysis one useful strategy is to begin coding with the predetermined codes (Hsieh & Shannon, 2005). After the data immersion phase that

resulted in highlighted segments of the printed transcriptions of all the interviews, the first researcher created the codes based on Hiver's (2015b, 2017) and Hiver and Dörnyei's (2017) four stages of self-organization that lead to language teacher immunity outcome. These codes were then subsumed under the four predetermined themes of triggering, coupling, realignment, and stabilization in MAXQDA 12.

In qualitative studies the credibility of the coding, which is a key to robust directed content analysis, is ensured through iterative analyses, seeking negative or contradictory examples, seeking confirmatory data through methodological triangulation, and providing supporting examples for conclusions drawn (Julien, 2008). The second researcher coded the data as well and the Cohen's Kappa for inter-coder reliability was 0.88 which is a credible index of reliability.

4. Results

In order to decide which type of immunity is dominant among Iranian English teachers the two-step cluster analysis was run. The two-step cluster analysis yielded two clusters based on Schwarz's Bayesian Information Criterion for cluster 1 (BIC = 848.997) and for cluster 2 (BIC = 695.236) and highest log-likelihood distance measure (ratio of distance measures = 3.245). 100 participants (43.5%) formed cluster 1, and 130 participants (56.5%) formed cluster 2. Table 1 presents the five clustering variables means and standard deviations for the two clusters. To validate the final two-cluster solution, the univariate main effects were conducted for all clustering variables (Table 1).

Table 1: Validated Cluster Profiles

	Cluster 1 (n = 100)		Cluster 2 (n = 130)		F-value	η^2
	M	SD	M	SD		
Teaching self-efficacy	5.99	.646	4.44	.851	230.625	.50
Resilience	6.03	.722	4.12	.872	313.232	.57
Openness	3.79	1.042	3.34	.782	13.965	.05
Classroom Affectivity	5.57	.913	4.10	1.047	125.304	.35
Attitudes to Teaching	5.63	1.065	4.39	1.337	58.213	.02

In cluster analysis an appropriate means to substantiate cluster-analytical results in educational contexts is to use criterion variables as independent indicators of cluster group differences (Csizer & Dörnyei, 2005). In this study, the two variables of coping and burnout were used as criterion variables. They were not included in determining cluster types, but served the purpose of confirming the validity of differences between the two clusters. Table 2 represents the means and standard deviations of these two criterion variables as well as their univariate main effects that were calculated for cluster membership in relation to the two clusters. In addition, in order to evaluate the predictive importance of these two criterion variables on the two final clusters, a multinomial logistic regression was run. The results of this analysis (-2 log-likelihood = 45.079, $\chi^2 = 243.9$, $df = 43$, $p = .001$) were indicative of a good fit. Together, all these validating measures indicated that the final two-cluster solution was the best way of clustering the participants.

Table 2: Differences in terms of Criterion Variables per Cluster

	Cluster 1 (n = 100)		Cluster 2 (n = 130)		F-value	η^2
	M	SD	M	SD		
Coping	6.05	.566	4.32	1.149	189.511	.45
Burnout	2.88	1.297	5.25	1.046	234.002	.50

Table 3 summarizes the composition of the two clusters based on gender, age, and years of experience in teaching.

Table 3: Composition of the Two Clusters

	Cluster 1	Cluster 2	Sum
	N (%)	N (%)	N (%)
Gender			230 (100%)
Female	68 (68%)	72 (55.4%)	140 (60.8%)
Male	32 (32%)	58 (44.6%)	90 (39.2%)
Age			
24-29 years old	4 (4%)	5 (3.8%)	
30-35 years old	32 (32%)	32 (24.6%)	
36-41 years old	27 (27%)	47 (36.2%)	
42-49 years old	37 (37%)	44 (33.8%)	
50+ years old	--	2 (1.5%)	
Experience			
1-2 years	--	--	
3-4 years	3 (3%)	3 (2.3%)	
5-7 years	17 (17%)	25 (19.2%)	
8-10 years	20 (20%)	21 (16.2%)	
11-15 years	24 (24%)	28 (21.5%)	
16-19 years	13 (13%)	16 (12.3%)	
20+ years	23 (23%)	37 (28.5%)	

By comparing clusters 1 and 2, we found that the participants in cluster 1 ($n = 100$) enjoyed positive immunity. As can be seen from Table 2, the mean scores on all clustering variables was high ($M > 5.50$) except for openness ($M = 3.79$). Teachers in this cluster could be considered as those whose teaching self-efficacy, resilience, and language teaching attitudes as well as their positive affect in their classrooms are exceptional. These teachers also showed robust coping skills with very low levels of burnout (Table 2) which could be regarded as remarkable characteristics of practitioners faring well. As for the teachers' teaching experience (see Table 3), we can say that those teachers with more than 8 years of teaching experience have developed the positive immunity.

Contrary to cluster 1, teachers in cluster 2 had developed negative immunity. These teachers accounted for 56.5% of the sample participants. They could be characterized as having a moderate to low teaching self-efficacy and resilience, and affectivity towards their classrooms. These negatively immunized practitioners were suffering from an aversion to change and novelty ($M =$

3.34) in teaching which could be attributed to their lack of autonomy in their classroom practices as well as the mandated curriculum they have to stick to. Their average attitudes towards teaching coupled with unsatisfactory coping skills ($M = 4.32$) and rather high levels of burnout ($M = 5.25$) are indicative of the fact that these teachers are spinning their wheels in the classroom and their career and show no signs of risk-taking ability. In the meantime, due to the education system in Iran, we were not surprised to see that teachers had started to develop negative immunity as early as their fifth year in their professional lifespan.

Language teacher immunity, either in its productive or maladaptive configuration, is an attractor state (Hiver, 2015a) that language teachers settle in after the process of self-organization. The findings of the qualitative part of the study are presented according to the four stages of self-organization.

4.1. Triggering Stage

If a complex system, here a language teacher, is to self-organize, some perturbations or stressors are necessary to disequilibrate the system, dislodge it from its initial attractor state, and send it onto a different path (Hiver 2015a). The interview data of the study revealed four major types of stressors: personal-level, school-level, organization-based, and sociocultural stressors. The first two types are considered as micro level and the other two as macro level stressors. Figure 1 offers a visualization of the number of segments coded with each code for each document.

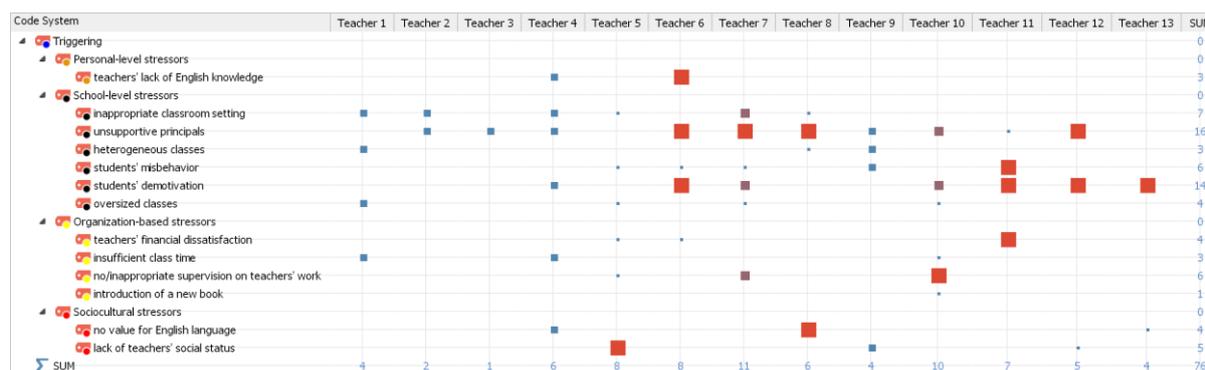


Figure 1: Four Stressor Types Frequencies

Although every teacher possesses a unique profile of what types of stressors might afflict them, as the 'SUM' column in Figure 1 shows, most of the stressors that Iranian English teachers confront pertained to their unfavorable educational context (school-level stressors), the most salient of which were students' demotivation and unsupportive principals. With regard to students' demotivation Teacher 6 and Teacher 13 respectively stated that:

"Demotivated students have really annoyed me over the past couple of years and it's getting worse year by year."

"One of the factors that causes teachers' stress in classroom contexts is the lack of motivation in students. The main reason for this demotivation is rooted in our society where students see no point in learning English."

As for the unsupportive principals, Teacher 12 and Teacher 7 respectively expressed their concern in the following way:

"Once I taught in a school whose principal had imposed some strict regulations. She didn't consider whether I was a good teacher or not. All she thought about was obeying those strict school regulations."

"The only thing that is important for our school principal is the students' high scores. He doesn't pay attention to his teachers' quality."

As mentioned earlier, in complexity theory these perturbations or stressors are essential because they cause the systems to fluctuate and move in a direction to adapt and reconfigure and maximize their individual fitness or preference (Heylighen, 2008). Due to the educational system in Iran, it comes as no surprise that the interviewed teachers had similar perturbations, but at this triggering stage, it cannot be said that the teachers travel down towards developing either productive or maladaptive immunity. It is from the *coupling* stage that they are driven towards shaping a given form of immunity.

4.2. Coupling Stage

According to Larsen-Freeman & Cameron (2008) the most significant characteristic of a complex system is change, and this change takes place through adaptability. The coupling stage can be considered as the onset of change and adaptability that the complex system is to go through. In this stage, the destabilized English teachers try to come up with a certain coping strategy or response to a given stressful situation they faced in the triggering stage. By doing so, they intend to rule out the negative effect of that stressful situation and re-stabilize and reconfigure themselves so as to stay effective. Initially these coping strategies are more or less random and are either adaptive or skewed and maladaptive. The following excerpt indicates that the teacher employed adaptive coping strategies when facing stressful event.

"When one experiences a stressful situation, they may easily fly off the handle. I will do my best to contain myself and won't let the stressful event affect me and my job. I don't have much stress, but when I face any, I will try to ignore it" (Teacher 10).

Another adaptive coping strategy which was used to tackle students' demotivation was mentioned by Teacher 7:

"What I can do inside the class to motivate my students is to make learning English a more interesting and enjoyable experience. For instance, I use educational films. I take my laptop to class and show them some footage."

In contrast to adopting adaptive coping strategies, teachers mostly resorted to maladaptive coping strategies in dealing with various stressors. The following excerpt echoes a teacher's concern regarding English teachers who lack skills and knowledge in their career:

"What I have heard from students is that their English teachers suppress them. They don't let them express their ideas in class. The students said that they had to only listen to their teacher and they were not allowed to ask questions that challenged their teachers' language knowledge" (Teacher 9).

Meanwhile, in the following excerpt Teacher 11 adopted an avoidance strategy in order to steer clear of her unsupportive principal.

"Our school principal kept coming to my class to remind me and my students not to make any noise. Till the end of that school year, I had to obey her and acquiesce to what she ordered. I didn't have to go through this bitter experience again and the next year I changed my school."

These excerpts clearly show that the teachers who utilized adaptive or maladaptive strategies in the face of adversities, were insistently seeking an internal equilibrium. Through these linked relationships (Hiver & Dornyei, 2017), teachers strived to reach a stability.

4.3. Realignment Stage

As mentioned earlier, in the coupling stage the coping strategies that English teachers resorted to in order to deal with the stressful events somewhat random. Over time, the randomness of the coping strategies becomes unified and teachers begin to have a repertoire of strategies to help them return to stability whenever stressors are experienced. In this stage the English teachers seem to have gained an ability to deal with and even control the stressors since they have employed a handful of coping strategies which obviously assist them in returning to their productivity and stability. This

new emergent stability (Hiver, 2017) is the result of the accumulated reactions to adversity and stressful situations through using coping strategies.

The following excerpt shows how those English teachers who are moving towards developing a productive immunity manifest signs of resilience, determination, and fulfillment.

"The demotivated students definitely affect the teachers' work. But not all students are demotivated and teachers should not simply consider those students in class. Teachers must insist on their goals in their teaching career. They are able to motivate even the demotivated students" (Teacher 13).

Despite the organization-based stressors like low remuneration or lack of supervision on teachers' work which had afflicted almost all English teachers, English teachers who were adapting towards productive immunity expressed their positive attitudes towards their career and students, "Every year I am learning positive things to help me continue my career for thirty years" (Teacher 6), or "I didn't surrender when faced with lack of appreciation from Education office. I just stuck to my goals and purposes in teaching English for the sake of my students" (Teacher 4).

In contrast, most English teachers were reconfiguring around maladaptive immunity. The symptoms of this type of immunity are various such as apathy, jaded indifference and rationalization (Hiver, 2017). The following excerpts clearly indicate that English teachers in Iran are suffering from these symptoms.

"Most teachers say: 'we go to class, teach, and leave the class. If students learn or don't learn, it's up to them. Why should we sacrifice ourselves for those demotivated students?' In fact, English teachers have given up and become apathetic" (Teacher 7).

"The myriad of stressful situations that English teachers confront in their career makes them lose motivation and become indifferent. And if any teacher gets demotivated, they are afflicted with gradual death and fossilization over their career lifespan" (Teacher 8).

By resorting to their accumulated repertoire of coping strategies, English teachers develop a control system to protect them against adverse and stressful events and return to equilibrium. This stability can be efficient (productive) or inefficient (maladaptive). The new emergent stability in English teachers paves the way for the adoption and stabilization of a new dimension in their identity.

4.4. *Stabilization Stage*

The stabilization stage can also be called identity reconstruction stage because English teachers solidify the new emergent outcome (Hiver, 2016b, 2017) into their professional identity. This new dimension of English teachers' professional identity, that is, productive or maladaptive immunity, functions as a protective shield against future perturbations and stressors. As it was expected, the interviewed English teachers talked about the maladaptive immunity of other teachers, not their own. They believed that English teachers in Iran had developed their immunity type as a result of working over many years in the teaching profession, being exposed to various types of stressors, and adopting a limited repertoire of coping strategies to avoid novelty, taking risks, change, vulnerability, etc.

"I have seen many maladaptively immunized teachers and I believe that more than 80% of my colleagues are suffering from the negative immunity. They resist changing their teaching methods. They believe in using technology to teach English, but have no interest and motivation in using it. They believe that their teaching is useless because of the mandatory curriculum and their lack of autonomy in decision-making even at school level" (Teacher 1).

"Facing different stressful situations over the years has made many English teachers thick-skinned and inflexible. They stick to just one teaching method and repeat it year by year. When they

pass some certain age, they lose their risk-taking ability and get burned out. They possess no self-confidence and feel as if they are useless" (Teacher 6).

Other English teachers who had developed positive immunity managed to maintain their stability and deal with stressors productively. They remained committed to their job with higher levels of motivation despite the many disturbances they encountered.

"When I was younger, I was very sensitive and easily lost my control in stressful situations. I was a perfectionist, in fact. Over several years, as I gained more and more experienced, I got realistic and this helped me know how to have a better relationship with my students" (Teacher 9).

Through these four stages the system has settled into a new attractor state and self-organized itself. The system is now intrinsically stable and not susceptible to change unless a big shocking perturbation occurs. Whether the new attractor state is productive or maladaptive immunity, it has one function: surviving the system.

5. Discussion

This study set out to find out which type of language teacher immunity was dominant among Iranian English teachers and, by employing a self-organization perspective, what stages these teachers have gone through to form their immunity type. The survey results indicated that 43.5% of English teachers had productive (positive) immunity, whereas 53.5% had developed maladaptive (negative) immunity. One finding that was similar in both clusters was that all the participants possessed the lowest openness to change (in cluster 1, $M=3.79$; in cluster 2, $M=3.34$). This aversion to change seems natural in our context in Iran and is in line with Namaghi's (2006) findings. In his study, Namaghi identified three categories which were beyond English teachers' control: 1) mandated curriculum, 2) mandated national testing scheme, and 3) make the grade pressure which controls the teaching/learning process where scoring well is superior to teaching well.

The predominance of maladaptive immunity among Iranian English teachers can be attributed to their low level of motivation and a lot of stress they are exposed to. Teachers in general and English teachers in particular constantly face stressors both at macro and micro levels. The findings of several studies conducted in Iran (e.g., Akbari & Eghtesadi, 2017; Namaghi, 2006; Sadeghi & Khezrlou, 2016; Sadeghi & Sa'adatpourvahid, 2016; Soodmand Afshar & Doosti, 2015, 2016; Yaghoubinejad, et al., 2016) attest to the undesirable conditions in which Iranian English teachers work. These unfavorable conditions have resulted in English teachers' low self-efficacy, resilience, classroom affectivity, openness to changes, attitudes to teaching, coping strategies, and high levels of burnout. All of these are conducive to making teachers prone to develop negative immunity. In the meantime, the interview data indicated that English teachers are generally dissatisfied with their work conditions. This is in line with Sadeghi and Sa'adatpourvahid's (2016) findings. In their study, the researchers identified 48 potential stressors out of which inadequate salary, English language and its teachers' low social status, teaching demotivated students, attitudes of principals, and poor working conditions had the greatest impact on English teachers' motivation and their commitment to their job. To top it off, as a result of English teachers' reluctance and aversion to change, and because they consider themselves as merely the implementers of mandated curriculum and slaves of the mandated testing schemes (Namaghi, 2006), they use very limited coping strategies in dealing with stressors and undesirable conditions in which they work (Akbari & Eghtesadi, 2017). In addition, low social status of English teachers and English language itself make teachers and learners demotivated. In our interview data some participants were critical of their job value and English language status as perceived by the society at large. This was also indicated by findings of Soodmand Afshar and Doosti (2015, 2016), Sadeghi and Sa'adatpourvahid (2016), and Yaghoubinejad, et al. (2016). When a language is not favored in the society and learning it has no immediate reward, learners lose their motivation in learning the language (Hiver, Kim, & Kim, 2018) and teachers may, in turn, get frustrated and demotivated.

English teachers in cluster 1 had seemingly developed positive immunity which was indicated by their high means on all scales except openness to change (see Table 1). As was evident from the interview data, these teachers had shaped the productive immunity mainly based on their intrinsic and altruistic motivation in their profession. Intrinsic motivation refers to the teachers' interest in English or in teaching it (Yuan & Zhang, 2017). Altruistic motivation refers to the love, passion and dedication to learners as well as pro-social commitments (Hiver, et al., 2018). This finding that intrinsic and altruistic motivation keeps English teachers functioning effectively in their profession is also echoed by Soodmand Afshar and Doosti (2015, 2016). In their studies, they concluded that despite many demotivating factors that Iranian English teachers were afflicted with, they were satisfied with intrinsic/altruistic aspects of their profession such as considering teaching as an interesting job, having positive feelings towards helping students learn, and feeling intrinsically satisfied with serving their society.

The results of the qualitative part of this study indicated that, in line with Hiver's (2015b, 2017) findings, Iranian English teachers had gone through the four stages of self-organization, namely, triggering, coupling, realignment, and stabilization in forming their immunity type. It seems vital for English teachers to develop an immune system over their career lifespan if they are to survive and "bend but not break" (Hiver, 2017, p. 683) within their profession. The construct of language immunity is a continuum at opposite ends of which lie positive and negative immunity. As different stressors are encountered, English teachers seem to incrementally move towards either end on the continuum. Thus, language teacher immunity cannot be considered as a fixed, stable state, rather as a dynamic system which might be triggered any time by a stressor (Ordem, 2017). But, as the interview data revealed, English teachers were in a rut due to their lack of control over school-, organizational-, and social-level factors that invariably caused them disturbances. So, they had become excessively stable in their daily professional practices. The interviewed teachers expressed their concerns vis-à-vis the excessive stability in English teachers like the following: "They are totally indifferent to and demotivated in their profession", "They hate change and persist in sticking to their traditional method of teaching", "Their knowledge and skills are outdated and fossilized", and the worst thing that was mentioned by a couple of participants was that "Some English teachers have no stress at all when facing perturbations". This indicates that some English teachers have such a stable, apathetic, settled, and callous professional identity (Hiver, 2017) that they are not disturbed by any stressor. In this case, the "teachers 'autoimmune disorder' will work against further self-organization in the system because it suppresses system dynamics" (Hiver, 2015b, p. 228).

6. Conclusion and Implications

The present study found out that the majority of English teachers in the areas that were investigated are afflicted with maladaptive immunity. The development of this type of immunity can be attributed to English teachers' having to encounter myriad stressful situations such as low remuneration, lack of social respect for teachers, demotivated students, unsupportive principals, low status of English language in society, etc., hence their very low motivation, high burnout, and negative immunity. Also, it was found that if teachers were productively immunized, it would be due to their intrinsic/altruistic motivation since these teachers loved English language, teaching it, or the students.

The study also found out that the development of either type of immunity took place through the four stages of (triggering, coupling, realignment, and stabilization) self-organization process. As mentioned earlier, teachers are architects and pillars of society. They can shape a nation's future by imparting their knowledge, skill, personal trait, and behavior to the students. As a result, firstly, the Ministry of Education as the main organization in charge of formal and general education should change the teachers' salary system so that their monthly income is adequate enough to meet the life expenditures of teachers and their family. A consequence of increasing teachers' salary would be that they might be more committed to their profession and wouldn't be forced to probably take another job to make their ends meet. Secondly, the Ministry of Education in general and Education Offices in each city in particular should take some measures to enhance the status and value of

English language as well as English teachers in society. By doing so, students may have a clear idea of why they are learning English and what they may be able to do with their English knowledge. This would, to a great extent, enhance students' motivation to learn English effectively. Thirdly, policy- and decision-makers in the Ministry of Education and teacher education universities (Farhangian University) should offer pre-service teachers sufficient training to familiarize them with the disturbances they may encounter in their job, the positive coping strategies to deal with these disturbances, the concept of teacher immunity as well as pathways of the immunization process. In-service teachers should also be provided with in-service sessions so as to help them understand the developmental process of language teacher immunity and its elements so that they can direct their immunity towards a desirable, productive outcome (Hiver, 2015b).

There are some limitations to this study. First, the number of participants was limited, especially in the qualitative part of the study. A larger sample in both quantitative and qualitative parts can produce more generalizable findings in Iran and other similar contexts regarding the dominance of a certain immunity type and its pathways of development. Second, although the concept of teacher immunity was originally put forward for language teachers, it can also be attributed to all teachers working in any educational system because those teachers could be unaware of their immunity type and its impact on their professional career. Finally, this study used only questionnaires and interviews to collect data. We suggest that future studies employ triangulation with several tools for gathering data.

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