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Delving into Teacher Stroke, Time Perspective and Creativity: Insights from EFL Students' Perceptions

Ehsan Taghdisi[1]
Ghasem Modarresi[2*]

[1]M.A. in Applied Linguistics, Department of English, Quchan Branch, Islamic Azad University, Quchan, Iran
[*2]Associate Professor of Applied Linguistics, Department of English, Quchan Branch, Islamic Azad University, Quchan, Iran

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CORRESPONDING AUTHOR

E-mail: qasem.modarresi@iauq.ac.ir

ABSTRACT

The present study, using a sequential mixed-methods design, mainly aims at determining the extent to which teacher stroke and teacher time perspective contribute to teacher creativity. In doing so, the participants consisted of 110 EFL students from English private institutes in the quantitative phase of the study, and a pool of eight learners were selected to participate in the qualitative phase of the study. A number of instruments were used to measure teacher stroke, time perspective, and creativity. To analyze the data, the Pearson moment-to-moment correlation, multiple regression, content-based categorization, and inter-coder reliability were used. The results revealed that there was a statistically significant association between teacher stroke and teacher creativity as well as between teacher time perspective and teacher creativity. Furthermore, the results of multiple regression determined that teacher time perspective was the most possible predictor of teacher creativity since this variable provided the most robust contribution to explaining teacher creativity. The results elicited from the responses to the interviews with the students provided nine themes including: positive feelings, energizer, motivation, time management, involvement, fun, active participation, self-confidence, and trying something new. Finally, a number of practical implications are offered from EFL teachers and students and some further suggestions are made.

KEYWORDS: Stroke; Time perspective; Creativity; Energy; Motivation; Involvement

1. Introduction

Research on second language (L2) achievement has recently concentrated on social-psychological perspectives, investigating the factors that contribute to learning and teaching a new language (Schutz & Pekrun, 2007; Frenzel & Stephens, 2013; Heiran & Navidinia, 2015; Pishghadam, et al. 2023). It seems that the feelings experienced by teachers in the classroom influence other emotional factors. Actually, prior research has demonstrated that positive emotions exert more significant influence than negative emotions (Chang, 2009). In this respect, Berne (1964, p. 14) proposed the concept of "recognition-hunger" to describe stroke, and Stewart and Joines (1987) classified possible forms of strokes such as verbal, nonverbal, positive, negative, and unconditional. For example, positive emotions encompass sensations such as pleasure and accomplishment (Frenzel, 2014). In their study, Keller, et al. (2014) discovered a negative correlation between happy emotions and burnout and a positive correlation between negative emotions and burnout. More specifically, Pishghadam and Farkhondefal (2017) scrutinized the notion of stroke in both psychology and second language teaching and they outlined different kinds of strokers and strokees. Later, Ebrahimi et al. (2022) highlighted

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the role that stroke play in students' academic success in L2 contexts. Nevertheless, the association of stroke with some important factors such as discipline and creativity is still needed to be clarified.

According to Francis-Smythe and Robertson (1999), research into individual differences traces back to the early 1990s. Indeed. according to Bergadaa (1990), time can be considered a social construct subjectively influenced by collective and individual variables. Levine (1997) argued that the cultural values of a community can be discerned by examining its norms and beliefs regarding the concept of time, establishing time as a social construct. However, it is crucial to recognize that time is not only a physical occurrence but also a psychological construct. In this respect, Baird et al. (2021) remarked that time perspective is related to important factors such as goal monitoring, academic success, and self-regulatory ability. Therefore, people have different perceptions and reactions to time, resulting in various attitudes and behaviors toward time (Francis-Smythe & Robertson, 1999). Hence, the psychological basis of time consists of multiple elements that are also related to individual differences. Meanwhile, further theoretical frameworks about time have been suggested by Naji et al. (2019), highlighting time perspective as a crucial element in the psychological formation of time, which encompasses the individuals' attitudes, beliefs, and feelings toward their past, present, and future. More especially, Meidani et al. (2021) highlighted the linkage between teachers' time perspective and emotions that they experience. Actually, gaining a more profound comprehension of the potential connection between stroke and time perspective with other determining factors such as creativity can provide further insight into teacher professionalism.

Furthermore, effective teaching necessitates the inclusion of several vital components. A key area of focus in the domain of psychology of language instruction is the notion of teacher creativity, as emphasized by Pishghadam (2011). Over the past few decades, there has been a notable increase in the importance of creativity and innovation in teacher instruction and modern technology (Chien & Hui, 2010; Modarresi & Jeddy, 2018). Moreover, the creationistic approach has become relevant in contemporary psychology and pedagogy, connoting that humans can be creative (Karwowski, et al., 2007). Given the importance of creative thinking as a vital skill in today's world, experts prioritize the development of this fundamental ability by supporting educators, educational institutions, and educational systems (see Fisher, 2004). To clarify, creative teachers use non-conformists, avoid repetitions, make use of a wide ranges of strategies and techniques, pause to re-think, and make use of fantasy (Richards, 2013). In the same vein, Navidinia et al. (2023) highlighted that psychological factors such as motivation, behavior, and autonomy are conducive to teaching success.

Indeed, teacher creativity should gain momentum in the field of second language acquisition (SLA) since encouraging creativity can be helpful in increasing desirable emotions and decreasing undesirable emotions. However, it seems that much of the related literature in psychology of education has paid particular attention to the cognitive psychology rather than the emotional psychology. Additionally, classroom instructions in English courses have not adequately considered the growing importance of time perspective in teaching agenda. That is why there is not sufficient research into the association of teacher stroke and time perspective with creativity. Thus, the present study tried to fill the gap by examining the potential contributions of teacher stroke and temporal perspective to their creativity in second language education, using both quantitative and qualitative research methods, to bring about transformation in educational settings. The rationale for choosing these variables is the significance of the underrated concepts of stroke and time perspective in SLA.

2. Literature review

2.1. Stroke and learning a new language

The existing literature acknowledges the remarkable influence of stroke on learning a new language (e.g., Wright et al., 2012; Rathel et al., 2014; Pishghadam, et al., 2019). The notion of stroke can help understand teacher praise and feedback in educational psychology (Wright et al., 2012; Rathel et al., 2014). As concluded by Burnett and Mandel (2010), teacher praise refers to the positive words about the students' behaviors and performance. Previous studies have shown that praise and feedback can effectively increase motivation in the students (Kirkland & Cunningham, 2012); therefore, it is reasonable to assume that stroke, a form of recognition, can have a similar impact on motivation. In this respect, stroke, as defined by Francis & Woodcock (1996), is directly linked to motivation. As reviewed by Hattie and Timperley (2007), it is essential to differentiate between stroke, feedback, and praise; stroke is about recognizing a person's presence by others, while feedback is a response to someone's actions, and praise is a form of positive feedback.

Meanwhile. According to Kusluvan (2003), people need to receive sufficient positive strokes to increase their inspiration. Actually, feedback about the self is strongly connected with the notion of stroke since it is individualistic and directed towards the self (Pishghadam & Khajavy, 2014). Moreover, research has shown a significant inverse relationship between absences and academic performance, suggesting that grades decline as the number of absences increases in the classroom (e.g., Brocato, 1989; Friedman et al., 2001; Gump, 2004). More recently, Noorbaksh et al. (2018) found that, from the students' perspectives, there was a significant relationship between teacher stroke and teacher success in second language teaching. Just recently, Khorsand and Modarresi (2023) found a significant association between strokes, teachers' emotions, and academic success in the Iranian context. However, although the incorporation of psychological concepts into language education is a matter of heated discussion in SLA, it seems that the affective-temporal bond can be regarded as a more novel strand of research in teacher professionalism.

2.2. Time perspective in L2 classroom context

Previous literature witnesses a favorable relationship between balanced temporal perspective and other important factors such as mental health and emotional intelligence (Stolarski et al., 2011; Zhang et al., 2013). To elaborate, Boyd and Zimbardo (2005) argued that a state of equilibrium exists between our past, present, and future perspectives, known as balanced time perspective. Furthermore, the existing literature acknowledges that a negative perspective on the past is associated with a range of psychological conditions, naming depression, anxiety, discontent, low self-esteem, and difficulties in interpersonal relationships (Zimbardo & Boyd, 1999; Stolarski et al., 2011; Abbasian & Modarresi, 2022). Conversely, a past-positive mindset, as concluded by Bryant et al. (2005), is strongly linked to high levels of self-confidence, vitality, satisfaction, and happiness (Zimbardo & Boyd, 1999; Zhang & Howell, 2011).

According to Zimbardo and Boyd (2015), individuals with a future perspective desire to achieve future goals and rewards; they exhibit anticipatory behavior and have trust in their ability to accomplish their goals in the future. In this line of research, temporal intelligence is a significant factor contributing to success across various cultures (Hunt, 1995). Clemens and Darlyrmple (2005) concluded that time-related factors are determining in leadership, and as further conceptualized by Doyle and Francis-Smythe (2008), this concept comprises self-referenced time personality and follower-referenced temporal activities. Indeed, individuals who achieve higher scores on tests tend to exhibit tremendous success across several domains, while those who obtain lower scores on tests tend to experience less success (Herrnstein & Murray, 1994). Alasmari et al. (2021) found that teachers' lack of time management as a classroom management strategy can hinder their self-efficacy and teaching effectiveness. Meidani et al. (2021) concluded that language teachers having a negative outlook on the past seemed to feel emotional exhaustion whereas those with past positive, were more likely to experience personal success in their career. More recently, Rahimi and Modarresi (2023) found a significant association between teacher emotions, energy, time perspective, and teacher success. Nevertheless, there are other important factors such as innovation and creativity that have not been sufficiently explored by professionals in the domain of SLA.

2.3. Teacher creativity

Historically, Rhodes (1961) classified over 50 definitions of creativity into four levels, using a qualitative technique; the 4-Ps concept comprises four levels: person, process, press, and products suggesting that persons who possess specified traits demonstrate a greater level of creativity than others. There is a differentiation between "big C" and "small c" creativity; the former substantially impacts society, whereas the latter centers around the manifestation of creativity in daily existence (see Maley, 1997; Craft, 2001). In this respect, Pennycook (2001) provides a perceptive analysis of the role of a critical teacher educator, introducing the term practicum to describe the integration of theory and practice to generate fresh and creative insights into the TESOL practicum. McDonald and Zeichner (2008) examined the transition from multicultural education to social justice, fostering teachers' awareness and creativity in critical teacher education. Burton (2010) concluded that creative teachers make use of student-centered, interaction-based, and open-ended elements to fortify creative thinking on the part of students. Navidinia et al. (2015) found that personality traits are related to teachers' self-concept including factors such as risk-taking and competence which are qualities of creative teachers. Modarresi et al. (2021) focused on the role of assessment-oriented literacy in elevating the level of positive feedback and engagement for creative teachers. Just recently, Mohammadi and Modarresi (2023) found a significant relationship between teaching motivation, conceptions of intelligence, and teacher creativity in the Iranian context.

Whereas the relationship between emotional factors and cognitive factors such as creativity has already been investigated to some extent in the Iranian context, the present study offers some important insights into the literature because the attention to the interplay between emotions, temporal, and cognitive issues would provide L2 teachers with valuable sources of information based on which they can create the most favorable emotional atmosphere in their classes for the students to participate more effectively and become fully engaged in accomplishing the learning tasks.

The present study followed the guidelines by Pishghadam (2011), who proposed the concept of applied English language teaching including a new responsibility for teachers to integrate real-life topics such as positive emotions and different kinds of intelligence into the school curriculum, fostering teachers to possess a deeper understanding of sense-induced emotions and to monitor their beliefs, motivation, and creativity connected to teaching and learning. Taken together, the present study, focusing on the students' perspectives, aimed at (1) investigating the significant association of teacher stroke and time perspective with their creativity; (2) identifying the potential predictors of creativity in stroke and time perspective; and (3) finding out the role of stroke and time perspective in enhancing creativity.

3. Methodology

3.1. Research design

The researchers employed a sequential mixed-methods research design (Johnson & Christensen, 2012) beginning with a quantitative approach performing a correlational design to find out the linkage between the three variables, including teacher stroke, teacher time perspective, and teacher creativity, and then, complemented by interview methods to capture the salient aspects of stroke and time perspective in enhancing creativity.

3.2. Participants

The sample comprised 110 EFL learners (females: n=78, 70.9%; males: n=32, 29.1%; Mean age=21.69 SD=2.64) who were selected from a number of private English institutes in Quchan, located at the northeast of Iran, based on convenience sampling. However, initially, their scores on Oxford placement test (OPT) were measured for homogeneity purposes. The researchers only considered students whose scores on the OPT were at the intermediate level so that the sample was as representative as possible with respect to their overall language knowledge. To be more exact, out of 142 participants, the number of learners whose scores were at the intermediate level was reduced to 110 learners. Moreover, in the qualitative phase of the study, the researchers chose eight learners (females: n=5, 62.5%; males: n=3, 37.5%; Mean age=21.12, SD=1.32) based on purposive sampling. The pertinent information was collected to the point that no new information was emerged from the responses.

3.3. Instruments

3.3.1. OPT

Initially, OPT was employed, as a standardized test of overall language knowledge, which includes 60 vocabulary and grammar questions in a multiple-choice format. The scoring rubric classifies the participants into five groups: elementary (1-14), pre-intermediate (15-29), intermediate (30-44), upper intermediate (45-50), and advanced (51-60). The volunteers who were categorized at the intermediate level joined the present study.

3.3.2. The student stroke scale

The Student Strokes Scale (SSS), developed and validated by Pishghadam and Khajavy (2014), was utilized to assess the instructional strokes provided by the teachers to their learners within the classroom setting. The questionnaire items were designed based on the primary attributes of stroke, including positive, negative, verbal, and non-verbal manifestations. Learners were required to provide their responses to 18 items on a 5-point Likert-type scale, which encompasses a range from 1 (indicating never) to 5 (indicating always). The estimated reliability for the whole items was reported as .88.

3.3.3. The time perspective inventory

The Time Perspective Inventory (Zimbardo & Boyd, 1999) as the most frequently-used scale on time perspective, was utilized to measure time perspective. The scale is composed of a total of 56 items with five subscales: past negative (consisting of 10 things), past positive (composed of 9 items), present hedonistic (composed of 15 items), present fatalistic (consisting of 9 pieces), and future (composed of 13 items). Participants were requested to provide answers to each statement on a 5-point Likert scale from very uncharacteristic (1) to very characteristic (5). The reliability coefficient as estimated by Cronbach's alpha was 0.71. In this study, the questionnaire was adapted by replacing the pronoun "I" with the pronoun "he/she" so that the students could respond to the items focusing on their teachers' time perspective. The reliability of the adapted questionnaire was 0.77.

3.3.4. The teacher creativity scale

To measure English language teacher creativity, the language teacher creativity scale, developed and validated by Pishghadam, et al. (2012), was used. The scale includes 63 items on a 5-likert scale of 1 (never) to 5 (always). The reliability of the scale was estimated by the Rasch model (r=.91).

3.3.5. Semi-structured interview questions

Four semi-structured open-ended questions were designed by the researchers to explore the role of stroke and time perspective in improving teacher creativity. The contents of the questions centered around the familiarity of the students with the concepts of stroke and time management as well as their teachers' mastery over positive strokes and optimal use of class time, and more specifically, how these variables are reflected in their creativity including the extent to which these factors are effective in empowering creative minds. Three experts who were faculty members of English language teaching checked the validity of

the contents of the questions. Having received the feedback provided by the experts, the researchers rechecked and revised the validity of the questions.

3.4. Procedure

The researchers collected the relevant data from 110 participants in six weeks from August 1402 to October 1402 during the regular class time. During the first week, the researchers distributed the OPT to the students for homogeneity purposes. In the second week, the students' stroke scale was distributed to the students. They received clear and comprehensive instructions regarding the allotted time and the way to respond to the items. During the third week, the time perspective questionnaire was distributed to the students, again providing clear instructions to accomplish the task. In the fourth week, the students were provided with the teaching creativity questionnaire with clear instructions. During the fifth and sixth weeks, the researchers conducted interviews to collect the students' perceptions of the influence of teacher stroke and time perspective on their creativity. The interview questions were formulated in English; however, the participants were free to provide precise responses to these questions in either Persian or English language.

The researchers performed statistical methods, entailing descriptive and inferential statistics, to find the answers to the research questions. Using the Pearson product-moment correlation coefficient, the researchers determined whether there was any significant association between stroke, time perspective, and creativity among EFL intermediate students. As for the second research question, multiple regression was performed to determine the best possible predictor of teacher creativity in stroke and time perspective. Finally, the researchers employed "theme-based categorization" (Dörnyei, 2007, p. 245) to provide codes for the information elicited from the learners' responses. The inter-rater reliability for coded transcripts was taken into consideration.

4. Results

4.1. Teacher stroke, time perspective, and creativity

The first objective of the study was to examine the significant relationship of teacher stroke and time perspective with their creativity. Before running Pearson product-moment correlation coefficient, the researchers, initially, inspected the assumptions of normality for the scores. The scatterplot displayed a positive relationship because the points were close.

Table 1. Descriptive statistics for teacher stoke, time perspective, and creativity

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Stroke	110	61.21	8.77	-.52	.23	-.30	.45
Time perspective	110	200.37	17.26	-.66	.23	-.73	.45
Creativity	110	252.53	16.30	-.75	.23	-.04	.45
Valid N (listwise)	110						

As shown in Table 1, initially, the assumptions of normality were checked, and the results reported no violation since the amount of skewness and kurtosis was between +2 and -2. The means and standard deviations of the scores were reported as follows: teacher stroke (M=61.21; SD=8.77), time perspective (M=200.37; SD=17.26), and creativity (M=252.53, SD=16.30).

Table 2. Correlations of teacher stroke and time perspective with creativity

		Teacher creativity
Stroke	Pearson Correlation	.31**
	Sig. (2-tailed)	.003
	N	110
Time perspective	Pearson Correlation	.43**
	Sig. (2-tailed)	.000
	N	110

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

As displayed in Table 2, there was a significant correlation between teacher stroke and creativity [r=.31, n=110, p<.05], and between teacher time perspective and creativity [r=.43, n=110, p<.05].

4.2. The predictors of teacher creativity in stroke, and time perspective

The second objective of the study concerned with the possible predictors of teacher creativity in stroke and time perspective. The researchers ran multiple regression to obtain statistical results. As of multicollinearity, the correlation between stroke and time perspective in the model was satisfactory since it was above 0.30 and below 0.90. Moreover, the multicollinearity assumption was not violated since the tolerance value for each independent variable was not less than .10. Likewise, the VIF value was found to be less than 10 which was an indication of normality of data. The normal probability plot of the regression standardized residuals was also checked, and the results showed that the points were placed in a reasonably straight diagonal line from bottom left to top right which was an indication of no significant deviations from normality. Additionally, the number of independent variables in this study was two, and following Tabachnick and Fidell's (2001) guidelines, the critical value must be less than 13.82, and since it was 8.86, there was no violation. The results of model summary showed that the model (which included scores on stroke and time perspective) explained 21 percent of the variance in creativity scores, and the results of ANCOVA showed that the model attained statistical significance (F=15.00, Sig = .00, p<.05).

Table 3. The predictors of teacher creativity in stroke and time perspective

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	158.52	17.23		9.20	.00		
	Stroke	.33	.16	.18	2.04	.04	.93	1.06
	Time perspective	.36	.08	.38	4.39	.00	.93	1.06

As indicated in Table 3, the most significant beta coefficient was .38 which was for teacher time perspective, indicating that this variable had the most substantial contribution to explaining teacher creativity when the variance by all other variables was controlled. The beta value for stroke was also significant since the significant value for it was less than .05 so that it could also significantly contribute to the prediction of creativity. Thus, as for the second objective of the study, teacher time perspective was the best predictor of teacher creativity.

4.3. The results from students' responses to the interviews

As for the third research question of the study exploring the students' perceptions of the influence of stroke and teacher time perspective on teacher creativity, the researchers conducted interview sessions with the participants, using the data saturation approach. Initially, the participants were asked to provide an introduction of themselves. Based on the results of the interviews, the students believed that teachers who provide positive reinforcement and are dedicated to their job greatly influence their students' motivation and desire to become engaged in learning. They remarked that putting sufficient time and effort by the teacher help build their confidence and increase their willingness to attend class and to participate in class discussion. To them, creative teachers are knowledgeable and follow their intuitions so that they hold us accountable for our progress. One of the students said:

> *Those teachers who emphasize the significance of time in enhancing our English language are more positive and energetic. However, some teachers express concern that the limited amount of time allocated for English language, with only two weekly sessions, needs to be increased.*

The students noted that some teachers waste the class time since they put too much attention to reading the roll and unfortunately, mostly speak in Persian language as the class proceeds and they focus more on translation and grammatical exercises. To them, these are teachers who follow the routines and they do not create surprises to make the task of learning a new language enjoyable and these behaviors bring about dissatisfaction and demotivation for us. Another student mentioned:

> *This year, I had a teacher who applied greater diligence and became an energizing force, making our class inspirable and dynamic, resulting in our enthusiastic attendance.*

Actually, students feel that effective factors such as the level of their involvement, motivational density, and desire to learn are interwoven to their teachers' positive emotional support, up-to-date knowledge, effort, and novelty in establishing a positive attitude towards learning and teaching the English language. Another student said:

Teachers should be cautious and avoid being impulsive, which can lead to dire consequences. I had a teacher who tended to be impatient and taught the lessons quickly without adequate attention to us. Despite his active presence in the classroom and frequent whiteboard use, I did not find the class effective and enjoyable.

Students believed that teachers who use a blend of methods and actively study new findings about pedagogical matters and do research exhibit higher levels of creativity. They stated that some teachers repetitively teach the same subjects to pupils for many years, needing more teaching experience since they lack original thought. Another student noted:

Some teachers reteach what they initially delivered during their early years of teaching, whether at the high school or private English institutes. However, there are teachers who avoid repetition and we get good vibes from their actions. They are also motivated not only by external factors but also by their desire and internal drive. Among these teachers, some clever individuals create valuable textbooks and articles.

Subsequently, the researchers calculated the inter-coder reliability of the codes emerged from the interviews with the students regarding their thoughts on the role of teacher stroke and time perspective in their creativity. The first author encoded the data and subsequently shared it with the second author. Then, the second researcher categorized the responses by discovering the shared factors and produced similar results with slight variations. Since both coders reached the same result, the inter-coder agreement about the findings was ensured. Initially, the researchers followed the guidelines proposed by Campbell et al. (2013) to divide the number of coding agreements by the total number of agreements and disagreements. As a result, they obtained an inter-rater reliability of 75 percent. There was a total of 12 recurring themes identified by at least one of the researchers. Out of these, there were nine instances where both coders had identified alike. Hereafter, the total inter-coder reliability was 75 percent (9/12 = .75). Some of the instances of the responses provided by the students with the corresponding codes are presented below:

Table 4. Some excerpts emerged from the interviews

Participants	Excerpts	Themes
Interviewee A	Teachers' attention to positive emotions can facilitate the process of learning.	positive feelings
Interviewee B	I am more willing to attend the class when the teacher energetically works with us on the learning tasks.	energizer
Interviewee C	What galvanized me to pursue my studies was the teacher who attended to me and pushed me pretty hard.	motivation
Interviewee D	To me, understanding the importance of time and knowing how to manage and make use of it is a key factor for evaluating the success of a teacher.	time management
Interviewee E	I am interested in teachers who are committed to helping their learners succeed because they can involve us behaviorally and cognitively.	involvement
Interviewee F	I like those teachers from whom I get good vibes and positive support and feedback. This makes me participate fully in the class.	active participation, fun
Interviewee G	I would like to interact with creative teachers since they have self-assurance and avoid doing repetition and this boost my confidence.	self-confidence
Interviewee H	I think that teachers who are creative make use of new activities and materials such as social media or ChatGPT.	Trying something new

As indicated in Table 4, to address the third objective of the study, the learners' commonalities were categorized into nine themes including positive feelings, energizer, motivation, time management, involvement, fun, active participation, self-confidence, and trying something new.

5. Discussion

The findings of the current study unveiled enlightening findings within the Iranian context. The results indicated a significant relationship between teacher stroke, time perspective, and creativity, from the students' perceptions. Furthermore, the study findings indicated that teacher time perspective was the most possible predictor of teacher creativity as it had the most significant contribution to explaining teacher creativity. Finally, after calculating inter-coder reliability, the detailed analysis of the themes revealed nine themes.

As for the first and second research objectives of the study, the findings of the present research are aligned with the research undertaken by Churches and Terry (2007) who found that teachers' attention and positive feelings positively impact students' academic advancement. Moreover, the obtained results are in agreement with the earlier research by Francis and Woodcock (1996) who confirmed a close linkage between stroke subscales and motivation, indicating a significant association among the constructs. This highlights the importance of establishing a stronger connection between positive emotions, time,

and academic achievement in our educational system. In the same vein, the obtained results are in line with the research work by Fried, et al. (2015) who concluded that teacher emotions directly influence students' cognitive processes and emotional experiences. Similarly, the findings are parallel to the findings by Zimbardo and Boyd (2015) who found that time perspective is associated with future academic goals and rewards. Likewise, Clemens and Darlyrmple (2005), focusing on the concept of temporal intelligence, tried to draw attention to the significance of time-related factors in leadership and management which is also an important issue in classroom management. In the same vein, Pishghadam et al. (2021) found that students' willingness to attend class can be predicted by their perceptions of stoke, credibility, and success on the part of the teachers. Likewise, Alipour and Modarresi (2024) found that time and effort, as the key elements of investment, are determining in students' academic success. Therefore, teachers' attention to emotional and temporal issues are conducive to both their own and their students' success.

As for the third research objective of the study, the findings of the study revealed that actively providing students with positive strokes and making the best use of time in class motivate them to learn and involve them in learning tasks. Similarly, the study by Stewart and Joines (1987) confirmed that factors such as attentiveness to homework, engaging in class discussions, and asking questions contribute to learning development. In the same vein, the results of the study conducted by Jalilzadeh et al. (2020) and Rouhani and Modarresi (2023) support the importance of engagement in teaching and learning success. The results of the study also highlight the view of teacher creativity both a product with a focus on a particular lesson or task and as a process with an emphasis on thinking processes and decisions that a teacher make (Jones, 2012; Richards, 2013). Additionally, increasing student motivation has been identified as a determining element in reducing the amount of school dropout among learners (e.g., Christenson & Reschly, 2010; Wang & Fredricks, 2014). Likewise, increased levels of learners' behavioral and emotional involvement have a substantial impact on reducing the prevalence of depression (Li & Lerner, 2011). Furthermore, the earlier research by Liu and Jackson (2008) showed that learners who lacked motivation were not inclined to engage in communication, suggesting that a lack of motivation in language learning strongly predicted students' reluctance to willingness to participate in class. Moreover, the results of the interviews are parallel to the research conducted by Krause (2014) who found that good behavior could generate fun and laughter, making it not only a source of motivation for students but also a catalyst for creating a more relaxed and cheerful classroom environment conducive to learning. The results of the interviews highlighted the role of time management in students' success, and similarly, Meidani et al. (2021) found that language teachers with a negative outlook on the past seem to carry negative emotions while those with a positive outlook on the past and also future time perspectives seem to have positive emotions regarding their academic achievement. Similarly, Zargaran (2024) concluded that creative teachers are metacognitively aware and knowledgeable.

Taken together, this study revealed that the concepts of teacher stroke and time perspective are significantly related to teachers' creativity from the students' viewpoints so that the use of socio-psychological factors such as positive strokes by the teacher help the students become more engaged in accomplishing the tasks which is in agreement the previous research by Mercer and Dörnyei (2020) who came to the conclusion that engagement in accomplishing the language tasks fortifies the language ability of the students. Moreover, this study corroborates the three-facet model of life-wise language teaching perceptions, developed by Tavakoli et al. (2017), that accentuating the symmetry between emotion and cognition. Therefore, employing positives strokes and making the best use of time can bring about an energetic environment for the students. Finally, the findings of the study support the viewpoint that there should be a notable movement in language instructions towards a more wholistic approach in English language classrooms, focusing on both emotional feedback and temporal issues rather than just paying due attention to the formerly dominant cognitive viewpoint in teacher professionalism, drawing on how teachers can apply creativity in their teaching by making the most of teaching moments.

6. Conclusion

The results of the present research provide compelling evidence for the need to broaden the scope and adopt a future-oriented approach to teachers' personalities, explicitly focusing on how creativity can be applied and supported in L2 contexts. For example, language courses, such as those focused on conversational skills, can provide students with engaging and interactive opportunities to talk about the capacity to be creative in learning and in life. Classroom teachers can serve as instructional scaffolders, helping students to become fully engaged in class activities while assisting students in fully engaging in class while identifying the variables contributing to a better society. Moreover, the focus on teacher time management in second language classes is precious because it enables them to effectively engage students in learning tasks by integrating their behavioral, emotional, cognitive, and social involvement into doing the learning tasks and solving their problems. Actually, higher engagement with the activity is associated with excitement and inventiveness, facilitating students' ability to think creatively and analytically.

The results of this study provide new and valuable information to the existing body of research by expanding our understanding of how specific pleasant experiences can provide learners with inspiration to develop more creative problem-solving and risk-taking skills. In our context, most classes are teacher-centered, meaning that teachers hold authority and maintain a distance from students whereas teachers can bridge this gap and create a more engaging classroom environment by dedicating more time to students, involving them in class discussions, and assisting them in their development. This approach

would encourage the students to actively participate in learning tasks and improve their receptive and productive skills. These findings emphasize the potential value of time-related factors and temporal intelligence in shaping teachers' current and future success.

Successful teachers are recommended to incorporate certain aspects of stroke since their positive strokes can facilitate their students' integration into the EFL learning environment and can assist them in self-regulating their motivation and progress. EFL teachers are responsible for providing creative activities which can involve them in problem-solving activities and foster a positive attitude towards learning English. They are expected to participate in pre-service and in-service training programs to learn more about the features of creativity and refine their perspectives of the concept of time. When it comes to EFL students, they should treat their teachers with utmost respect and benefit from the positive feedback and the time that teachers invest in them. They are expected to attend to their teachers' strokes and focus on positive feelings like pride and enjoyment while avoiding negative feelings that negatively influence motivation and grit. They can model their creative teachers as exemplary persons to develop the capacity to be creative in learning and in life.

Whereas the present study offers some intriguing insights, it is exposed to several limitations. First, researchers are required to be highly cautious of the external generalizability because the target participants are not typical of all intermediate EFL learners. Furthermore, more longitudinal research with a longer duration can examine the extent to which stroke and time perspective can improve teachers' novelty and creativity from the students' perspectives. The current study examined the correlation of teacher stroke and teacher time perspective with teacher creativity. Further research is required to replicate the study to establish its validity within the school and university settings. In addition, research must be conducted to determine the correlation between stroke and time perspective with other important factors such as teacher credibility, grit, and active motivation. Further research could investigate the degree to which these factors differ based on the teachers' sociocultural and socioeconomic background. Finally, more research is needed to delve into the concept of teacher creativity using qualitative methods such as metaphor elicitation.

7. References

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