An Investigation on the Influence of Temperament on L2 Achievement of Adult Turkish Learners of English

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Abstract

Temperament has attracted a lot of attention over the years and may be linked to the success or failure in the performance of an L2. The interest brings up the motivation to investigate Learners' variation, while some are better and some are poor in L2 performance (Ellis, 2008). There have been claims that temperament of a learner determines the failure or success in language learning and use (Pennebaker & King, 1999).

This study investigate the influence of temperament of Turkish EFL Learners in L2 achievement, temperament is a major aspect of humans and there have been different argument and to where it originate from either from genes or the environment. Behavioral science is of the view that genes affect temperament than the environment. 'Heredity has a greater influence on one's personality and behaviour than either one's upbringing or the most crushing social pressure' (Lang, 1987, p.58-66).

Introduction

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As seen in Collins English Dictionary, 'temperament, is a Latin word which means 'to mix'. It can be traced from the ancient times of Socrates, Plato, Hippocrates and Galen to David Keirsey and the likes. The focus however will be on Galen who classify temperament into four types: Sanguine, Melancholy, Choleric and Phlegmatic as seen in Kagan (1998). According to Galen, it is those features which set one individual apart from another individual, in a person, there is the mixture of different temperament types with only one dominant.

Each one have their own unique features which include strengths and weaknesses. People are categorized into the temperament which mostly fit the particular features they might have. The table below briefly give some description of the characteristics of each temperament.

Table 1.1: Galen's temperament type.

Sanguine	Choleric	Melancholy	Phlegmatic
cheerful	optimistic	melancholy	calm
friendly	active	sensitive	dependable
talkative	confident	analytical	efficient
lively	strong-willed	perfectionist	Easy-going
restless	Quick to anger	moody	passive
Self-centered	aggressive	unsociable	stubborn
undependable	inconsiderate	rigid	lazy

Source: www.psychoheresy-aware.org/e-book/4temp-ebk.pdf

There is however, a mixture of two or more temperament in a person with one dominant, means that a person may have the characteristics of a phlegmatic for example and choleric or more but there is only one obvious major temperament which is dominant. https:// en.m Wikipedia.org/wiki/four_ temperament.

Nyongesa (2004) said personality is of two categories, extrovert and introvert. The extroverts have the features of sanguine and choleric while the introverts have the features of melancholic and phlegmatic. He goes further to talk about the flaws and strengths of the extroverts and introverts.

The sanguine has flaws such as been emotionally unstable, egocentric, undisciplined, exaggerates and unreliable while the strengths are been friendly, passionate, social, honest and responsive. For choleric, the flaws they have include been blunt, cold, mean, sarcastic and easily angered while their strengths is been autonomous, visionary, decisive, forcefully willed. On the

other hand for the introverts, the Phlegmatic has strengths as such calmness, dependable, humorous and reliable, while the flaws are such as been passive, worrier, easily frightened and a procrastinator. The melancholic person has flaws such as been moody, pessimistic, revengeful, self-centered and unsocial while the strengths include gifted, analytical power, industrious, aesthetic and self-disciplined.

Table 1.2: Temperament grouped

Stable

Temperament	Features	Temperament	Features
Sanguine	Leadership, Carefree, Lively, easygoing, Responsible, Outgoing, Sociable.	Phlegmatic	Calm, Even-tempered Reliable, Controlled, Peaceful, Thoughtful, Careful, Passive
Choleric	Active, Optimistic, Impulsive, Changeable, Excitable Aggressive, Restless	Melancholic	Active, Optimistic, Impulsive, Changeable, Excitable Aggressive, Restless

Unstable

Source: (Nodoushan, 2011, p.39)

Past findings discussions

This current study was conducted to examine the influence of temperament on the acquisition of L2 in Turkish EFL speakers, the English language proficiency level is examined in relation to the temperament a person has to try to know if a certain personality/temperament may perform better than others with a different personality.

Past studies that failed to find any direct relationship between personality traits and second language learning was carried out by Ehrman and Oxford, Carrell and Anderson (1994) and also by Tuen Mun in Hong Kong. However, according to Berry (2007, p. 23), 'extreme extroverts and extreme introverts perform differently on an oral test depending on the degree of extroversion present in the individual'.

Bush (1982), Dewaele and Furnham (1999), are of the belief that extroverts have more skills and perform better than introverts in oral skills because of the features they have. In a research done by the latter, the extroverts were seen to be much more successful on the verbal aspect than the introverts even though the differences was not so obvious as regards accuracy. A study was conducted by Bush (1982) which could not confirm any connection in extroverts performing better than introverts in L2 acquisition. Van, (2005, p.96), is of the belief that introverts are better language learners because of their ability for 'extra mental concentration and can focus more on a task at hand" according to Eysenck (1947), the ability introverts have 'makes them the prime candidate for successful learning'.

Ellis 1994 argues that there is no particular basis to determine the personality variables that will be negatively or positively connected to that aspects of L2. Some findings which confirmed this was conducted by Bush (1982) who tested his hypothesis in Japan, which is that extroverts would perform higher than introverts but the result of his study could not confirm this, instead, it showed a negative correlation between extroversion and pronunciation. Gill (2004) study result also confirm that "extroversion has no priming effects" (37).

In written English however, introverts are seen as better performer, but because of the varied measuring devices used, there may be other factors which are responsible for this and not just temperament, an example may be the absence of proper context or instrument.

Methodology

Spearman is used because of its suitability for Likert scale system of surveying (ordering method: 12345 for various degrees of conviction). Numbers were used to show differences in individual responses, not weight or scale as observed in appendix 1. Pearson is however suitable for scaly and numerical data. So when integers are used to present responses to data, it is better to establish relationship between variable with spearman.

ANOVA is a technique used to determine whether there is any significant differences or not among variables with more than two groups (between the temperament types and test scores for various types of the test done). There must be more than two groups and each group must have replicates: questionnaires eliciting the same response from different individual with different response which showed differences in their scores and grades even among the same type of

temperament. Once significance was found, we went further to determine which temperament was different.

Standard deviation determines spread of data (not tendency): determines whether the data is skewed or not, if there is outlier or not, whether the pole is very far from mean (average value).

Participants

For the study 100 people were selected randomly from four language course centers in Istanbul-Turkey, their English language proficiency was not taken note of at this point. Their gender and age was also not taken into consideration, the selection however include, adults of working class, and teenagers.

Instruments

Two major instruments was used. The first one was the personality/temperament questionnaires used to assess the temperament of the subjects. It has forty questions which must be answered according to the degree of how it describe them. It has two sections. The first is measured from a scale of one to five while the second section requires objective responses as to their awareness of temperament.

The second instrument is an English Language proficiency test which tries to measure their English language performances. It has four parts which is inclusive of writing, speaking, reading and listening, they were interviewed for the oral aspects, one after the other.

Procedure

After the consents of the participants was approved, the first questionnaire which is the personality test was given to them in paper format. They were instructed as to how to fill it. Then it was taken from them on completion. The second questionnaire was then administered to them and on the listening part of it, they were called one after the other to be interviewed and were scored instantly on the oral part.

After all the questionnaires were gathered, the paper format of their responses on the personality test was inputted online to get the temperament each belonged to from the internet.

Results and Discussion

The participants were classified into four temperament type based on the percentage score gotten from the personality test conducted and calculated online. The Sanguine included 29 participants [n = 29], Phlegmatic included 39 participants [n = 39], Choleric included 19 participants [n = 19], and melancholic included 13 participants [n = 19].

Table 2.3: Distribution of Respondents by Temperament Types

	Frequency	Valid Percent
Sanguine	29	29.0
Phlegmatic	39	39.0
Choleric	19	19.0
Melancholic	13	13.0
Total	100	100.0

The findings, indicate more sanguine and phlegmatic temperament representation than the choleric and melancholic temperament, however, there are more introverts [n = 52] than extroverts [n = 48] present in this study. From this result, the four temperament are not evenly distributed among the Turkish EFL learners and this variation as is been investigated has the tendency to influence the final result gotten.

The table below shows the performance of L2 across the temperament line using Spearman Correlation Analysis, the influence of temperament types on the level of language skills in L2 performance is obvious.

Table 2.4: Correlation analysis showing the relationship between respondents' temperament and L2 performance

				L2 performance			
	Reading	Writing	Word	Word	Listening	pooled	

			Recognition	structure	and speaking		
Temperament	.396**	.036	.056	.117	-.001	.100	.174***
	.000	.719	.579	.247	.993	.324	.083
	100	100	100	100	100	100	100
Spearman's Correlation Sig. (2-tailed) N							

* Significant at 0.01 and *** at 0.1.

In the skills of reading, writing, word recognition, word production, listening and speaking, there is a positive correlation of .396, .036, .056, .117 and .174 respectively, while, the skills of word structure is negatively correlated with -.001. It also reveal the significant relationship of temperament types of the Turkish learners of EFL in reading statistically proven with the correlation coefficient of +0.396 at P>0.01 which means about 40% relationship exited between temperament type and ability to read English.

This implies that the type of dominant temperament of EFL Turkish learner influences their performance in reading. Also, the correlation coefficient for the overall performance in the table that was polled was significant at P<0.01 and positive and this implies about 17% relationship between temperament type and English Language performance among the Turkish EFL learners.

Sanguine	Phlegmatic	Choleric	Melancholic	Pooled

L2 option	Mean	Std. D.	Mean	Std. D.	Mean	Std. D.	Mean	Std. D.	Mean	Std. D.	Ftest
Reading	4.76	3.66	7.75	2.06	9.36	0.81	7.15	2.66	7.11	3.09	26.999*
Writing	0.72	0.92	2.59	2.31	2.05	1.84	0.61	0.96	1.69	1.95	8.142*
Word recog.	7.17	4.09	8.64	2.79	8.16	2.85	7.69	4.38	8.00	3.45	1.055
Word prod.	3.28	1.69	4.41	1.19	4.31	1.11	3.61	2.10	3.96	1.54	3.904*
Word structure	2.48	1.33	3.02	1.55	3.53	0.51	1.92	1.89	2.82	1.47	4.238*
Listen & Speak	2.28	1.6	3.05	2.29	3.42	2.84	2.77	4.32	2.86	2.58	0.870
combined (60)	20.79	10.12	30.9	7.83	31.26	6.4	23.46	10.62	27.07	9.8	9.734

NB. Significant at P<0.01. 10 marks is the maximum mean value obtainable.

The extent of variation in temperament and the effect(s) on L2 acquisition by Turkish EFL speakers was considered using the mean scores, standard deviations and ANOVA analysis. The result showed that EFL Turkish speakers with the choleric-dominated temperament had the best performance (9.36±0.81) in the reading of English language followed by the phlegmatic (7.75±2.06), and melancholic (7.15±2.66) and then the sanguine-dominated temperaments with (4.76±3.66), weighted mean scores and standard deviations.

The F-value (26.999) from reading obtained with ANOVA was significant at P<0.01 which reveals temperament difference and shows a significant difference in the reading performance among the Turkish EFL learners as regards temperament. However, writing skill was generally poor among the EFL Turkish speakers. The result showed that the phlegmatic individuals did much better than the others. In order of performance, phlegmatic-dominant respondents scored 2.59±2.31, followed by the choleric respondents (2.005±1.84), then the sanguine (0.72±0.92), and the melancholic (0.61±0.96). F test (8.142) at P<0.01 showed significant difference among the performances which implies that differences in the temperament types caused differences in L2 writing performance among the EFL Turkish speakers.

In terms of word recognition, phlegmatic learners took the lead. According to the table above, phlegmatic respondents had mean score of 8.64±2.79, followed by 8.16±2.85 for the choleric, then, 7.69±4.38 for the melancholic while 7.17±4.09 was scored by the sanguine personalities.

However, the F-test (1.055) was not Significant at P>0.1 which implied that performance of the individual EFL Turkish speaker is no different based on the temperament type.

Another important L2 EFL performance type considered was word production among the respondents. The result showed that overall performance was less than five (3.54±1.54). In collective term, the phlegmatic respondents had the best performance with 4.41±1.19 followed by the choleric (4.31±1.11), after which we had the melancholic (3.61±2.10) while the sanguine had the least performance in word production.

To determine if these temperaments have significant difference to word production performance, F-value was 3.904 and significant at P<0.01. Thus, we can say therefore that there is significant difference in word production performances across the temperament line.

Similarly for word structure, the highest mean score was below 4.00 out of 5.00 points adduced to word structure. Nevertheless, individual of the choleric type put up a very good performance with mean score and standard deviations of 3.53±0.51 followed by the phlegmatic individuals (3.02±1.55), then the sanguine (2.48±1.33) while the melancholic respondents performed the least (1.92±1.89). This performance was shown to be significantly different from one temperament type to another (F=4.238, P<0.01).

In the same manner, listening and speaking skills were examined for performance differentials among L2 EFL Turkish Speakers. The result showed mixed performances within and across the temperament line. Table 4.4 indicated that respondents with dominant temperament of the choleric origin showed the best sign of good performance (3.42±2.84) followed by the phlegmatic (3.05±2.29), then the melancholic (2.77±4.32), while the sanguine gave the least performance (2.28±1.60). The result was however not significantly different from one another across the temperament line (F=0.870, P>0.1).

The performance for all the acquired L2 EFL was examined and as documented in Table 4.4, it was found out that choleric individuals gave the overall best performance (31.26±6.4). This was followed by the Phlegmatic (30.9±7.83), then the Melancholic (27.07±9.8), while the sanguine put up the least overall performance (20.79±10.12).

The standard deviations were very high which is suggestive of different performance level with each temperament type.   This result implies that temperament type clearly caused significant

differences (F=9.734, P<0.01) among the L2 performances of EFL Turkish speakers but this difference is not absolutely associated with the temperament type only.

Conclusion

 While temperament has some relevance to performance in some aspect of English language skills, in some other aspects, the influence cannot be observed. This may mean that even though temperament may influence some aspects of L2 acquisition, it does not influence other aspects, other reasons may be accountable for this which may be beyond temperament itself. However, further studies is recommended to check this.

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APPENDIX 1

	Does not describe me				Describes me
melancholy	○	○	○	○	○
aggressive	○	○	○	○	○
calm	○	○	○	○	○

cheerful	○	○	○	○	○
worrier	○	○	○	○	○
quick to anger	○	○	○	○	○
peaceful	○	○	○	○	○
bouncy	○	○	○	○	○
paranoid	○	○	○	○	○
workaholic	○	○	○	○	○
can be lazy	○	○	○	○	○
friendly	○	○	○	○	○
moody	○	○	○	○	○
hardcore	○	○	○	○	○
hides anger	○	○	○	○	○
affectionate	○	○	○	○	○
insecure	○	○	○	○	○
strong-willed	○	○	○	○	○
passive	○	○	○	○	○
lively	○	○	○	○	○

	Disagree		Neutral		Agree
I have difficulty starting tasks.	○	○	○	○	○
I like poetry.	○	○	○	○	○
I do things I later regret.	○	○	○	○	○
I need a push to get started.	○	○	○	○	○
I want to get up and leave everything behind some days.	○	○	○	○	○
I try to act confident, but it does not come naturally.	○	○	○	○	○
I have to psych myself up before I am brave enough to make a phone call.	○	○	○	○	○
I don't make the best choices.	○	○	○	○	○
I'm a full time daydreamer.	○	○	○	○	○
I am not nearly as in control as I seem.	○	○	○	○	○
I feel that my life lacks direction.	○	○	○	○	○

I love to daydream.	○	○	○	○	○
I feel attacked by others.	○	○	○	○	○
I am not quite sure what I want.	○	○	○	○	○
I feel that I'm unable to deal with things.	○	○	○	○	○
My whole body shivers sometimes when I listen to good music.	○	○	○	○	○
I wait for others to lead the way.	○	○	○	○	○
My ideas are often ignored.	○	○	○	○	○
My life isn't really headed anywhere right now.	○	○	○	○	○
I think hypnosis is fake.	○	○	○	○	○

You have completed the personality test. Just a few more questions before your results.

Do you already think you know what your temperament is?

○ Yes

○ No (then skip these questions)

What do you think your temperament is?

[▼]

How confident are you that this is your type?

○ Not very confident

○ Confident

○ Very confident

Approximately how many hours in your life have you spent learning or thinking about the four temperaments?

○ 0-1 hours

○ 2-5 hours

○ 6-20 hours

○ 21 or more hours

Were your answers accurate and can they be used in our research?

○ Yes. ○ No.

Appendix 2

Colds: A Reading and Writing Comprehension Exercise

Adapted from www.elcivics.com/worksheets/cold-healthcare

Pedro has a cold. His nose is stuffed up, he coughs a lot, and he has a sore throat. He felt fine last night, but now he is very sick. Pedro wants to go home and rest, but he can't. He is an accountant and payroll is due today. He needs to print and sign payroll checks so the employees get paid on time. Pedro's boss went on a business trip to Springfield, Illinois. He won't be back until next week. Before he left, he asked Pedro to take care of the office. There are twenty office workers,

and they are all very busy. Hopefully, they won't catch Pedro's cold. If the employees catch colds, they might take several days off work.

B. True or False

1. _____ Pedro is sick.

2. _____ All twenty office workers are busy.

3. _____ Pedro's boss is on vacation.

4. _____ An accountant needs to be good at math.

5. _____ Employees get payroll checks.

C. Yes or No – Share your opinion.

1. _____ Pedro should stay at work.

2. _____ Pedro should go home immediately and eat chicken soup.

3. _____ The employees should avoid touching their nose, eyes, and mouth.

4. _____ Pedro should cover his mouth when he coughs.

5. _____ It's okay if the employees get paid late.

D. Writing – What do you do when you have a cold?
_____
_____
_____

Word Recognition Vocabulary Exercise

Family Photos

lives	pictures	are	husband	was	anniversary	movie	wait	dinner	people

Directions: Complete the story with the vocabulary words in the box.

Rosario and Karen are at work. Karen has pictures of her family on her desk. Rosario wants to know who are in the (1) _____. "Hi Karen, how (2) _____ you today?" says Rosario. "I'm fine," answers Karen, "how (3) _____ your weekend?" she asks. "It was okay. We didn't do anything special. I cleaned the house on Saturday, and Benny and the kids went to see a (4) _____. We ordered pizza and chicken wings for (5) _____, so I didn't have to cook," says Rosario. "That's good. You had a relaxing weekend," says Karen. "Hey, who are the (6) _____ in the photos?" says Rosario. "This is a picture of my daughter and my mother. My mom came out to visit us last summer. She (7) _____ in Montana. And this is a picture of my husband and me when we got married. The last picture is of our dog, Ralph," says Karen. "I've never met your (8) _____. How long have you been married?" says Rosario. "We've been married for twenty-four years. Our (9) _____ is in June," says Karen. "Our daughter is eighteen years old. What about you? Are you married?" she asks. "No, I've been dating my boyfriend for two years. We talked about marriage, but we decided to (10) _____," says Rosario.

Word Production Vocabulary Exercise

1. The meeting is _____ for 7pm tonight.

    A. Scheduled B. covered C. argued D. alighted

2. She was so _____ with the gift.

    A. transfixed B. augmented C. Delighted D. described

3. The policeman asked her to _____ the thief.

    A. Describe B. narrate C. prescribe D. tell

4. You should exercise _____ regularly.

    A. most B. More C. never D. best

5. I have to meet your parent for the _____.

   A. setting B. workings C. alternative D. Arrangement

Word Structure Exercise

Adapted from www.ingleseemilano.it/pdf/esl-exam-b1

1.   I'm not sure this is the size. Can I try _____ to see if it fits?

   A. on it B. it up C. It on D. out it

2.   The brochures _____ by a printer.

   A. is produced B. Are produced C. are producing D. has been produced

3. He began driving six hours ago. He _____.

   A. has driven since six hours B. has been driven for six hours C. Has been driving for six

      hours D. is driving for six hours

4.   The soldiers _____ out the officer's orders

   A. put B. Carried C. got D. took

5. Although he had little money, he offered to pay for her lunch. In spite _____ little money, he

   offered to pay for her lunch.

   A. of have B. to have C. he had D. Of having

   Listening and Speaking Parts

   Imagine a celebrity coming to your country to interview random people and you were

   selected and asked the following questions.

   Question 1: What do you do in your free time?

Question 2: Tell me about your family.

Question 3: Where do you see yourself in five years?

Question 4: Describe your favorite television show?