



The Role of Situational Interest and Personality Traits in Language Learners' Transformative Engagement in Academic Reading

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Abstract

The current study primarily explored the link between EAP students' L2 situational interest (SI) and academic reading transformative engagement (TE). Moreover, it explored SI and its subcomponents, triggered SI and maintained SI as predictors of TE. We also sought the role of different disciplines as moderators of the relationship between SI and TE. Finally, we investigated the big five personality traits as predictors of TE. The participants of this study were 160 undergraduate EAP students recruited through quota sampling. A quantitative research method with a correlational design was employed to conduct the study. Two questionnaires were adopted to measure academic reading TE and personality traits, and a questionnaire was adapted from math SI to English learning SI to assess the students' L2 SI. The results revealed a significant and positive relationship between students' L2 SI and their academic reading TE. SI significantly predicted TE, and between its subcomponents, only maintained SI strongly and significantly predicted TE. Neither the difference between the disciplinary groups in terms of students' TE nor the interaction of the comparative disciplinary groups by SI was significant. The result indicated the agreeableness trait as the sole predictor of TE. Our findings have fruitful pedagogical implications discussed in the conclusion section.

Keywords: Transformative Engagement, Situational Interest, Personality Traits, Disciplines

The ultimate goal of any teaching and learning activity is learners' effective learning, and fulfillment of this objective without learners' engagement is a long shot. Research reports that engagement in language learning inside the classroom significantly contributes to intrinsic motivation to learn language, higher course achievement, and higher attendance in class (Dincer, Yeşilyurt, & Demiröz, 2017). However, language learning is not limited to the classroom (Hyland, 2004) and active engagement in out-of-class activities contributes to successful language development (Lai, Zhu, & Gong, 2015) as well. Indeed, the most successful language learners usually attribute a large portion of

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their success to actions they take to expend opportunities for language learning outside the classroom (Nunan, 2014). Due to the fact that engagement in learning inside and outside of class is important for successful language learning, this study considered both in-class and out-of-class contexts for investigating language learning engagement. In this regard, the “Transformative Experience” framework (Pugh, 2002) was adopted. This framework incorporates both in and out-of-class engagement and represents a deep level of engagement by emphasizing engagement outside of the classroom (Pugh, Linnenbrink-Garcia, Koskey, Stewart, & Manzey, 2010) was adopted. Transformative experiences are those in which learners apply concepts they have learned in class to their daily lives in order to perceive and interact with the world in novel, meaningful manners (Pugh, Bergstrom, & Spencer, 2017a) and comprise three aspects, including “Experiential value”, “Expansion of perception” and “Motivated use”. Despite the fact that the Transformative Experience construct has been developed in the field of science education, it theoretically applies to other content domains (Pugh et al., 2010). Abdollahzadeh, Amini Farsani, and Zandi (2022) applied Pugh’s transformative experience framework (2002) to the language domain in specific academic reading skill, and in the current study, we draw on it to examine language learners’ academic reading TE. Academic reading is the most commonly taught language skill in academic contexts in Iran and has received substantial attention from Iranian researchers (e.g., Aghazadeh, Mohammadi, & Sarkhosh, 2019; Barjasteh, & Biria, 2021; Safari & Mohaghegh Montazeri, 2017; Zarei & Amani, 2018; Zare).

Nevertheless, an open question is why some learners undergo TE and others do not (Pugh et al., 2019). In this respect, there exists evidence of the significant and positive relationship between situational interest (SI), openness to experience (one of the big five personality traits) and transformative experience in the domain of science (ibid). Moreover, there is a wealth of evidence within the literature suggesting SI enhances students’ engagement (e.g., Flowerday & Shell, 2015; Hui, Qian, & Kwok, 2019). With respect to personality traits, it is reported that students’ engagement is predicted by the traits of openness (Mahama et al., 2022), conscientiousness (Kim, Shin, & Swanger, 2009; Mahama et al., 2022; Qureshi, Wall, Humphries, & Balani, 2016), agreeableness (Furnham, Chamorro-Premuzic, & McDougall, 2003; Mahama et al., 2022; Qureshi et al., 2016), and neuroticism (Angelovska, Mercer, & Talbot, 2021). However, the role of these individual factors in the occurrence of transformative engagement (TE) in language learning has remained unexplored. Thus, the present study aims to fill this gap by exploring the role of SI and personality traits in language learners’ TE in academic reading skill. To this end, the “four-phase model of interest development,” projected by Hidi and Renninger (2006), is adopted to examine EAP students’ SI. According to this model, TE comprises two subcomponents of triggered SI and Maintained SI. This study not only explores the relationship between SI and TE but investigates the role of SI and its two subcomponents as predictors of academic reading TE. Furthermore, the current study seeks out how different disciplines moderate the relationship between SI and TE. We investigated four disciplinary groups of Life Sciences, Arts and Humanities, Social

Science, and Physical Sciences. In terms of personality traits, the Big Five personality traits model (Costa & McCrae, 1985; Digman, 1990), which includes traits of agreeableness, conscientiousness, extraversion, neuroticism, and openness, is employed. We aim to discover the predictive role of these personality traits in the occurrence of TE. The following research questions guided the study:

1. Is there any significant relationship between students' L2 situational interest and academic reading transformative engagement? If so, to what extent does students' L2 situational interest predict their academic reading transformative engagement?
2. Which type of situational interest is the strongest predictor of students' academic reading transformative engagement?
3. Do disciplinary groups moderate the relationship between students' L2 situational interest and academic reading transformative engagement?
4. What types of personality traits are the strongest predictors of students' academic reading transformative engagement?

Literature Review

Transformative Experience

The "Transformative Experience" (TE) construct is a particular kind of engagement that demonstrates a high level of engagement by emphasizing engagement outside of the class (Pugh et al., 2010). Pugh (2002), drawing on Dewey's work (1934) on aesthetic and educational experience, developed a "transformative experience" framework comprising three aspects: experiential value, expansion of perception, and motivated use. Experiential value refers to the appreciation of content for its application to current and daily experiences (Pugh et al., 2010). Expansion of perception concerns viewing and comprehending different elements of the world in a novel way (Pugh et al., 2010). Motivated use has to do with the use of academic material in situations where it is not necessary, especially outside of the classroom (Pugh, Bergstrom, Heddy, & Krob, 2017b). Although Pugh's TE framework was originally developed in the science field, Abdollahzadeh et al. (2022) successfully applied it to the language domain, in particular, academic reading skill. They also examined the association between L2 motivation and reading TE and found that students' L2 motivation significantly contributed to their TE in academic reading skill. In the science domain, Pugh et al. (2019) also explored several factors such as SI, task values, personality traits, positive/negative emotions, and anxiety as predictors of TE. The result revealed that maintained SI, openness to experience personality traits, high degree of task values and good feelings, and low degrees of bad feelings and anxiety highly predicted students' TE.

Situational Interest

One of the well-established frameworks to consider is the "four-phase model of interest development," proposed by Hidi and Renninger (2006). This model consists of four phases, namely, triggered, maintained, emerging, and well-developed interest. Triggered interest refers to a temporary psychological state caused by changes in affective and cognitive functioning. If such change is sustained, it can develop into maintained

interest, which involves sustained attention and persistence over an extended period. These two phases are categorized as "situational interest" (SI), which is triggered by environmental cues and occurs immediately (Ye, Liu, Wei, & Zhang, 2022). On the other hand, the emerging and well-developed interest phases are a part of "individual interest," which grows over time based on SI and is relatively more long-lasting (ibid). The present study centers on social interaction (SI) due to its reported ability to promote engagement (Flowerday & Shell, 2015; Hui et al., 2019; Linnenbrink-Garcia, Patall, & Messersmith, 2013; Tulis & Fulmer, 2013). As previously mentioned, Pugh et al. (2019) further found that continued SI significantly contributes to TE. In addition, research indicates that SI has a positive impact on reading comprehension (Braten, Anmarkrud, Brandmo, & Stromso, 2014; Hidi, 1990; Hidi & Baird, 1988). Given the benefits of self-instruction (SI) for improving both reading strategy use and processes, it is anticipated that SI will enhance text comprehension in reading.

Personality traits

Personality has to do with a person's dynamic and organized collection of traits that affect his/her thoughts, motives, and actions in a variety of contexts (Adewale, 2013). The most prevalent personality model is the "Big Five Personality Traits" (Anglim & O'Connor, 2019; Laverdière, Morin, & St-Hilaire, 2013; O'Connor, Stone, Walker, & Jackson, 2017), which encompasses five higher-order personality traits, including openness, agreeableness, conscientiousness, extraversion, and neuroticism (Costa & McCrae, 2008). Agreeableness is characterized as altruistic concern for others, as well as feelings of trust and generosity (McCrae & Costa, 2003). Extraverts are active and energetic, enjoy staying busy and acting and speaking quickly, favor stimulating situations, and frequently seek out excitement (ibid). People with high conscientiousness are responsible and disciplined; they are also ambitious and tireless, to the extent that they sometimes become "workaholics" (ibid). Open people appreciate novelty and variety, lose themselves completely in their interests, create different associates with ideas, and tolerate (even enjoy) ambiguity (Costa & McCrae, 2011). Individuals who are high in neuroticism frequently experience angry or unpleasant emotions that make it difficult for them to solve problems or get along with others (McCrae & Costa, 2003).

Numerous previous studies have explored personality traits' role in students' engagement. Mahama et al. (2022) investigated how the big five personality traits predicted cognitive, behavioral, and emotional engagement in college students. Their findings indicated that the traits of openness, conscientiousness, extraversion, and agreeableness significantly predicted academic engagement among students. The traits of conscientiousness, extraversion, and agreeableness were more prominent in behavioral, emotional, and cognitive engagement, respectively. Qureshi et al. (2016) also investigated personality traits as predictors for these three types of engagement. While there was a differential pattern for the association between personality traits and engagement dimensions in their findings, conscientiousness and agreeableness remained persistent predictors. Durak's (2022) study discovered that students with high levels of openness had low levels of engagement compared to those who were highly agreeable and had

higher levels of engagement. Meanwhile, in the language domain, Angelovska et al. (2021) investigated the connection between personality traits and language learning engagement among EFL tertiary-level students. The report identified neuroticism as the sole predictor of language learning engagement and its cognitive and affective engagement aspects.

Method

Design

A quantitative research method with a correlational design was adopted to conduct the study. In this regard, correlation, regression, and moderation analyses were performed. The main variables of this study were TE as the dependent variable and SI triggered SI, maintained SI, agreeableness, neuroticism, conscientiousness, openness, and extraversion personality traits as the independent variables.

Participants

A total of 185 undergraduate freshmen students studying various majors at a reputable state university in Kermanshah, Iran, took part in this study. Using a quota sampling method, we selected 160 students as our final participants. Initially, potential candidates were selected with purposeful sampling, and then we utilized Nesi and Gardner's (2006) classification scheme to categorize different majors into main disciplines. Consequently, the participants were classified into four disciplinary groups, each containing 40 individuals, as follows:

Arts and Humanities (40): Arabic studies (22) and philosophy (18)

Life sciences (40): animal biology (23) and molecular and cell biology (17)

Physical sciences (40): computer engineering (25) and electrical engineering (15)

Social sciences (40): economy (40)

The participants were both male (54) and female (106), with ages ranging from 19 to 27 and had taken general English courses at their university.

Instruments

Three sets of questionnaires were used to collect data:

Transformative Engagement Scale. Learners' academic reading TE was measured using the Farsi version of a questionnaire developed by Abdollahzadeh et al. (2022). It contained a total of 28 items assessing three aspects of TE, including experiential value (10 items), motivated use (11 items), and expansion of perception (7 items), on a five-point Likert scale from 1 (strongly disagree) to 5 (strongly agree). As the study reported, the instrument enjoyed high reliability and acceptable construct validity. Our Cronbach's Alfa reliability analysis for the present study also yielded a coefficient of 0.93 for TE construct and coefficients above 0.80 for its three subscales.

Situational Interest Scale. To measure students' SI in learning English, a questionnaire on math SI, devised by Linnenbrink-Garcia et al. (2010), was adapted to English learning SI in this study. It comprised 12 items measuring two subcomponents of

SI, named triggered SI (4 items) and maintained SI (8 items), using a seven-point Likert scale from 1 (strongly disagree) to 7 (strongly agree). Linnenbrink-Garcia et al. (2010) validated the questionnaire successfully. Moreover, we obtained Cronbach's Alfa reliability coefficients above 0.80 for the interest construct and its subscales. We also translated the items from English into Farsi language.

Personality Traits Scale. We utilized the 10-item Big Five Inventory (BFI-10), developed by Rammstedt and John (2006), to evaluate the higher-order personality traits of the students, comprising agreeableness, neuroticism, extraversion, conscientiousness, and openness. Each personality trait was measured through two statements on a five-point Likert scale from 1 (strongly disagree) to 5 (strongly agree). The findings of Rammstedt and John's (2006) research established that the BFI-10 inventory demonstrated high levels of reliability and validity. In our research, Cronbach's Alpha reliability produced a coefficient of 0.81 for neuroticism and coefficients above 0.70 for the remaining personality trait scales. The English version of the questionnaire was translated into Farsi.

The gender, age, field of study and educational degree of participants were collected in a separate section at the beginning of the questionnaires.

Procedure

First of all, items of a questionnaire on math SI were adapted to English learning SI and two valid pre-established questionnaires on reading TE and personality traits were selected. The TE questionnaire was in Farsi, but SI and personality traits were in English; therefore, these two questionnaires were translated from English into Farsi to be administered to Farsi-speaking participants. Then, the potential candidates who met our criteria in terms of bachelor's educational degree, taking general English courses, and fields of study were identified. After piloting the adapted SI questionnaire on a number of target-like students, all three questionnaires were administered to the selected potential students. The questionnaires were administered with the assistance of class professors, and students took part voluntarily. Moreover, several IETS and general English books, in PDF format were presented to the participants as incentives to encourage them to take part in the study. The collected data from 185 students were entered into the SPSS program, and the corrupted data in which students skipped some items and answered most items in the same pattern were removed. Subsequently, applying a classification scheme (Nesi and Gardner, 2006), four disciplinary groups of 40 people, named Life Sciences, Arts and Humanities, Physical Sciences, and Social Sciences, were selected among the total data, which left us with the final 160 participants. Finally, the intended statistical analyses were performed on the data in SPSS.

Data Analysis

The IBM SPSS Statistics 26 was used to conduct the statistical analyses. First, Cronbach's Alpha reliability analysis was run to examine the reliability of the instruments. Then, Descriptive Statistics were performed to describe the characteristics of the variables. Next, the relationship between TE and SI was examined through Pearson

Correlation analysis. Subsequently, a simple linear regression and a multiple regression were run to discover the extent to which SI and its subcomponent (triggered SI and maintained SI) predict TE, respectively. Following that, Hayes PROCESS Macro, v. 4.2, model 1, was used to explore whether the four disciplines moderate the relationship between TE and SI. Finally, the personality traits were examined as predictors of TE through a multiple regression analysis.

Results

Descriptive Statistics

In order to obtain a summary of the variables' characteristics, Descriptive Statistics were performed. The features of TE and its qualities are described in Table 1.

Table 1.

Descriptive Statistics of transformative engagement and its subscales

	Min	Max	Mean	SD
Transformative engagement	1.46	4.86	3.62	0.62
Motivated use	1.00	4.82	3.42	0.71
Expansion of perception	1.14	5.00	3.58	0.72
Experiential value	1.60	5.00	3.88	0.69

An overview of Table 1 shows that the learners were well engaged in academic reading, and all dimensions of TE played an important role in this regard. As the mean values suggest, experiential value ranked higher than expansion of perception and motivated use in the students' TE; however, the difference between these three qualities was marginal.

Table 2 below presents the characteristics of SI and its subcomponents.

Table 2.

Descriptive Statistics of Situational Interest and its subscales

	Min	Max	Mean	SD
Situational interest	2.58	7.00	5.10	0.92
Triggered situational interest	1.00	7.00	4.25	1.31
Maintained situational interest	2.25	7.00	5.52	0.98

As can be seen from Table 2, the students had a considerable level of SI in learning English and their maintained SI was higher than their triggered SI in this respect.

The features of personality traits are summarized in Table 3.

Table 3.

Descriptive Statistics of Personality Traits

	Min	Max	Mean	SD
Extraversion	1.00	5.00	3.13	1.13
Agreeableness	2.50	5.00	4.13	0.66
Conscientiousness	1.50	5.00	3.31	0.88
Neuroticism	1.00	5.00	3.02	1.16
Openness	1.00	5.00	3.89	0.79

As presented in Table 3, agreeableness was the most and neuroticism was the least prevalent personality trait among the students.

Correlation between TE and SI

To address the first research question, the relationship between TE and SI was examined using Pearson correlation analysis. The result of this analysis is illustrated in Table 4 below.

Table 4.

Correlation Analysis between Transformative Engagement and Situational Interest

		Transformative Engagement	Situational Interest
Transformative Engagement	Pearson correlation	1	0.58**
	Sig. (2-tailed)		0.00
Situational Interest	Pearson correlation	0.58**	1
	Sig. (2-tailed)	0.00	

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

As displayed in Table 4, the p-value of 0.00 and coefficient of 0.58 suggests that there was a significant and moderate relationship between students' TE and SI in a positive direction.

Simple Regression Analysis for SI as Predictor of TE

We conducted a simple linear regression analysis to discover the extent to which SI predicts TE. Table 5 demonstrates the result of this analysis.

Table 5.

Simple Regression for Transformative Engagement and Situational Interest

Independent variable	β	T-value	Sig.
Situational interest	0.58	9.07	0.00

Based on Table 5, the coefficient ($\beta = 0.58$) and p-value ($p < 0.005$) indicated that students' SI positively and significantly predicted their TE.

Multiple Regression Analysis for SI Subcomponents as Predictors of TE

To answer the second question, we explored the subcomponents of L2 SI (i.e., triggered SI and maintained SI) as the predictors of TE, using a multiple regression analysis (See Table 6).

Table 6.

Multiple Regression for Transformative Engagement and Subcomponents of Situational Interest

Independent variables	β	T-value	Sig.
Triggered situational interest	-0.02	-0.41	0.68
Maintained situational interest	0.67	10.24	0.00

From Table 6 can be seen that the maintained SI is the sole and strongest predictor of TE.

Moderation Analysis for Disciplines as Moderators

To respond to the third question, a moderation analysis was conducted for disciplinary groups as the moderators of the relationship between SI and TE using Hayes PROCESS macro, model 1. Table 7 shows how SI predicts TE in each disciplinary group.

Table 7.

Conditional Effects of Situational Interest at Values of the Disciplinary Groups

	β	T-value	Sig.
Life Sciences	0.42	4.11	0.00
Arts and Humanities	0.40	5.28	0.00
Social Sciences	0.34	3.64	0.00
Physical Sciences	0.44	4.64	0.00

According to Table 7, the coefficients (β) and p-values indicate that SI significantly predicts TE in all four disciplines.

The model, presented in Table 8 below, compared the disciplinary groups one by one in terms of TE level to discover whether there is a difference in the students' TE between disciplinary groups. Moreover, it examined the interaction of each comparative disciplinary group by SI.

Table 8.

Model for the Between Group Differences in Transformative Engagement

	β	T-value	P-value
1- Life Sciences vs. Arts and Humanities	0.01	0.14	0.88
2- Life Sciences vs. Social Sciences	0.11	0.98	0.32
3- Life Sciences vs. Physical Sciences	0.19	1.69	0.09
4- Arts and Humanities vs. Social Sciences	0.10	0.83	0.40
5- Arts and Humanities vs. Physical Sciences	0.17	1.54	0.12
6- Social Sciences vs. Physical Sciences	0.07	0.64	0.51

	β	T-value	P-value
Interaction 1 by SI	-0.02	-0.17	0.86
Interaction 2 by SI	-0.08	-0.62	0.53
Interaction 3 by SI	0.01	0.13	0.88
Interaction 4 by SI	-0.06	-0.53	0.59
Interaction 5 by SI	0.04	0.34	0.73
Interaction 6 by SI	0.10	0.79	0.42

As demonstrated in Table 8, the model suggests that no significant difference exists between the disciplinary groups in terms of TE in academic reading skill. The coefficients and p-values also indicate that the difference in the students' TE is higher between Life Sciences and Physical Sciences than between other disciplines; however, it is not statistically significant. Moreover, the interaction of none of the comparative disciplinary groups by SI is significant.

Multiple Regression Analysis for Personality Traits as Predictors of TE

To respond the fourth research question, the big five personality traits were examined as the predictors of TE using a multiple regression analysis. The result is displayed in Table 9.

Table 9.
Multiple Regression for Transformative Engagement and Personality Traits

Independent variables	β	T-value	Sig.
Extraversion	0.12	1.53	0.12
Agreeableness	0.16	1.92	0.05
Conscientiousness	0.13	1.52	0.13
Neuroticism	0.10	1.31	0.19
Openness	0.07	0.91	0.36

According to the coefficients and p-values presented in Table 9, only the agreeableness trait ($\beta = 0.16, P \leq 0.05$) significantly predicted students' TE in academic reading skill.

Discussion

The current study aimed to examine the correlation between L2 SI of EAP students and their academic reading TE. Thus, the study highlights the importance of cultivating L2 SI in EAP students to enhance their academic reading skills. The analysis revealed a significant and positive correlation between these two variables. Further investigation indicated that enhancement of students' L2 SI causes an improvement in their TE for academic reading. Students' interest in learning English is often stimulated by engaging activities such as reading texts on new and interesting topics, participating in exciting classroom activities, and learning useful strategies. As a result, students become more engaged in academic reading both inside and outside the classroom. The findings of the second research question expand upon these results by revealing that the maintained SI is

the only and strongest predictor of TE. Only when students sustain their initial interest in learning English over a prolonged period do they engage with academic reading skills both inside and outside the classroom? This correlates with the findings of Pugh et al. (2019) in the field of science, who discovered that only maintained SI, not triggered SI, had significant predictive power for students' TE. Similar to our research, prior studies by Hui et al. (2019), Flowerday and Shell (2015), and Linnenbrink-Garcia et al. (2013) indicate that SI plays a significant role in enhancing student engagement. Nonetheless, their comprehension of engagement varies from ours. The indicators of engagement, according to their study, were page views within the learning management system, the time students spent reading and writing essays, and teachers' perceptions of students' academic engagement. In contrast, our focus was on how students applied what they learned in class to their daily lives outside the classroom. We used a questionnaire to assess students' deep level of academic reading engagement.

The third question in this research sought to determine whether the four disciplines of Physical Sciences, Life Sciences, Social Sciences, and Arts and Humanities moderate the relationship between SI and TE. The results of our PROCESS moderation analysis indicated that the students' TE in academic reading was significantly predicted by their L2 SI in all four disciplinary groups. However, neither the difference between the disciplinary groups in terms of students' TE nor the interaction of the comparative disciplinary groups by SI was significant. In accordance with the current results, Abdollahzadeh et al. (2022), in their MANOVA analysis, found that students' academic reading TE was not significantly influenced by the variation of these disciplinary groups.

Regarding the fourth research question, our findings suggested agreeableness personality traits as the sole predictor of the students' academic reading TE. Being successful at work or in educational contexts and doing social activities are priorities for agreeable people (Judge, Higgins, & Thoresen, 1999). Moreover, it is assumed that highly agreeable people adhere to their given tasks and assignments (Salgado, 2002). Lounsbury, Sundstrom, Loveland, and Gibson (2003) also suggest that agreeableness fosters class attendance, social interaction, and group work. Therefore, as documented, the reading TE of the agreeable students can be explained by their desire to succeed in academic reading skill, to do reading exercises inside and outside the class, to do group work, and to communicate their learnings and ideas with others in their social interactions. Besides, given that agreeableness deals with being considerate and trusting and having faith in the best of other people (McCrea & Costa, 2003), it is assumed that trusting in and caring about teachers and what they teach associates with an enhancement of students' TE. A salient characteristic of agreeable individuals is being generous and altruistic, which means they have concerns for others and enjoy helping other people (McCrea & Costa, 2003). Hence, agreeable students probably would like to share their learning with their friends inside and outside the class. In support of the role of agreeableness in engagement, Furnham et al. (2003) note that agreeableness could be related to engagements' emotional and social dimensions. The finding of this study partially converges with that of Mahama et al. (2022) and Qureshi et al. (2016), as they found agreeableness as one of the

significant predictors of students' engagement. These studies concentrated on three dimensions of the multidimensional engagement framework, named cognitive, behavioral, and affective engagement, approximately corresponding to three aspects of TE, expansion of perception, motivated use, and experiential value, respectively (Pugh et al., 2017a). However, unlike multidimensional engagement's aspects, which emphasize on in-class engagement, TE' qualities focus on engagement beyond the classroom, which is unique in engagement literature (ibid). Similar to our findings, Yildiz Durak (2023) also found that highly agreeable students had a high level of engagement. On the contrary, Angelovska et al. (2021) identified neuroticism trait as the exclusive predictor of EFL students' engagement.

Conclusion

This study was primarily designed to examine the role of L2 SI and its subcomponents in the occurrence of academic reading TE among EAP students. The findings indicated that an increase in students' L2 SI enhances their TE in academic reading skill. Interestingly, only one subcomponent of SI, named maintained SI, predicted TE, implying that only if students' triggered interest endures for a relatively long time do they get engaged in reading transformative experiences. The current study also sought to explore the influence of four disciplines (i.e., Physical Sciences, Life Sciences, Arts and Humanities, and Social Sciences) as moderators on the relationship between L2 SI and academic reading TE. We found no significant difference in students' TE between these disciplinary groups; the interaction of the compared disciplines by SI was insignificant as well. Another objective of this study was to investigate the big five personality traits, including openness, agreeableness, neuroticism, conscientiousness, and extraversion, as predictors of TE in academic reading skill. The result yielded the agreeableness trait as the sole predictor of students' TE, suggesting that characteristics of agreeable people push them toward academic reading engagement in and out of class.

The findings of this research have significant implications for EFL teachers, as they can foster the engagement of their students both in and out of class by increasing and, most importantly, maintaining their L2 interest. They are required to identify ways to stimulate and sustain their students' interest through conducting action research, relying on their teaching experience, studying previous studies, and so forth. The material developers can also enhance students' L2 SI and, in turn, their TE by developing interesting materials that capture students' attention. Given that the agreeableness trait predicted students' TE in this study, teachers can focus on features of this kind of trait. For example, as agreeable people are trusting, teachers should make students trust in instructors' qualifications to improve their engagement.

Although TE is a noble learning outcome per se (Pugh et al., 2010), it is fruitful to examine the effect of students' academic reading TE on their academic achievement in future studies. Given that Pugh's transformative experience framework is new in the language learning domain, further research is required to discover the role of different variables in the occurrence of TE in this field. In the current study, we examined L2 SI

and big five personality traits as predictors of academic reading engagement. It is recommended that future studies explore the role of other variables in the enhancement of students' TE in reading skill and other language skills. Moreover, little is known about the ways in which students' L2 interest is triggered and maintained. Therefore, future studies are required to identify different ways in this regard.

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References

- Abdollahzadeh, E., Farsani, M. A., & Zandi, M. (2022). The relationship between L2 motivation and transformative engagement in academic reading among EAP learners: Implications for reading self-regulation. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.944650>
- Adewale, O. S. (2013). Teaching personality as a necessary construct for the effectiveness of teaching and learning in schools: An implication for teacher development in the era of globalization. *Journal of Education and Human Development*, 2(2), 15-23.
- Aghazadeh, Z., Mohammadi, M., & Sarkhosh, M. (2019). The effect of summary training on intermediate EFL learners' reading comprehension in individual and collaborative conditions. *Teaching English as a Second Language Quarterly (Formerly Journal of Teaching Language Skills)*, 37(4), 47-70. <https://doi.org/10.22099/jtls.2019.33798.2695>
- Angelovska, T., Mercer, S., & Talbot, K. R. (2021). Personality traits as predictors of language learner engagement. *Language Learning in Higher Education*, 11(2), 285-310. <https://doi.org/10.1515/cercles-2021-2026>
- Anglim, J., & O'Connor, P. (2019). Measurement and research using the Big Five, HEXACO, and narrow traits: A primer for researchers and practitioners. *Australian Journal of Psychology*, 71(1), 16-25. <https://doi.org/10.1111/ajpy.12202>
- Braten, I., Anmarkrud, O., Brandmo, C., & Stromso, H. I. (2014). Developing and testing a model of direct and indirect relationships between individual differences, processing, and multiple-

- text comprehension. *Learning and Instruction*, 30, 9–24. <https://doi.org/10.1016/j.learninstruc.2013.11.002>
- Costa, P. T., & McCrae, R. R. (1985). *The NEO personality inventory*. Odessa, FL: Psychological Assessment Resources.
- Costa, P. T., Jr., & McCrae, R. R. (2008). The Revised NEO Personality Inventory (NEO-PI-R). In G. J. Boyle, G. Matthews, & D. H. Saklofske (Eds.), *The SAGE handbook of personality theory and assessment, Vol. 2. Personality measurement and testing* (pp. 179–198). Sage Publications, Inc. <https://doi.org/10.4135/9781849200479.n9>
- Costa, P. T., & McCrae, R. R. (2011). The five-factor model, five-factor theory, and interpersonal psychology. *Handbook of interpersonal psychology: Theory, research, assessment, and therapeutic interventions*, 91-104.
- Credé, M., Harms, P., Niehorster, S., & Gaye-Valentine, A. (2012). An evaluation of the consequences of using short measures of the Big Five personality traits. *Journal of personality and social psychology*, 102(4), 874. <https://doi.org/10.1037/a0027403>
- Dewey, J. (1934). *Art as Experience*. Perigee: New York.
- Digman, J. M. (1990). Personality structure: Emergence of the five-factor model. *Annual Review of Psychology*, 41, 417–440. <https://doi.org/10.1146/annurev.ps.41.020190.002221>
- Dincer, A., Yeşilyurt, S., & Demiröz, H. (2017). Multidimensional classroom engagement in EFL classrooms. In D. Koksal (Ed.), *Researching ELT: Classroom methodology and beyond* (1st ed., pp. 91-102). Peter Lang.
- Furnham, A., Chamorro-Premuzic, T., & McDougall, F. (2003). Personality, cognitive ability, and beliefs about intelligence as predictors of academic performance. *Learning and Individual Differences*, 14(1), 47-64. <https://doi.org/10.1016/j.lindif.2003.08.002>
- Flowerday, T., & Shell, D. F. (2015). Disentangling the effects of interest and choice on learning, engagement, and attitude. *Learning and Individual Differences*, 40, 134-140. <https://doi.org/10.1016/j.lindif.2015.05.003>
- Hidi, S. (1990). Interest and its contribution as a mental resource for learning. *Review of Educational Research*, 60, 549–571. <https://doi.org/10.2307/1170506>
- Hidi, S., & Baird, W. (1988). Strategies for increasing text-based interest and students' recall of expository texts. *Reading Research Quarterly*, 23, 465–483. <https://doi.org/10.2307/747644>
- Hidi, S., & Renninger, K. A. (2006). The four-phase model of interest development. *Educational psychologist*, 41(2), 111-127. https://doi.org/10.1207/s15326985sep4102_4
- Hui, Y. K., Li, C., Qian, S., & Kwok, L. F. (2019). Learning engagement via promoting situational interest in a blended learning environment. *Journal of Computing in Higher Education*, 31, 408-425. <https://doi.org/10.1007/s12528-019-09216-z>
- Hyland, F. (2004). Learning autonomously: Contextualising out-of-class English language learning. *Language awareness*, 13(3), 180-202. <https://doi.org/10.1080/09658410408667094>
- Judge, T. A., Higgins, C. A., Thoresen, C. J., & Barrick, M. R. (1999). The big five personality traits, general mental ability, and career success across the life span. *Personnel Psychology*, 52(3), 621–652. <https://doi.org/10.1111/j.1744-6570.1999.tb00174.x>
- Kim, H. J., Shin, K. H., & Swanger, N. (2009). Burnout and engagement: A comparative analysis using the Big Five personality dimensions. *International Journal of Hospitality Management*, 28(1), 96-104. <https://doi.org/10.1016/j.ijhm.2008.06.001>

- Lai, C., Zhu, W., & Gong, G. (2015). Understanding the quality of out-of-class English learning. *TESOL Quarterly*, 49(2), 278-308. <http://www.jstor.org/stable/43893754>
- Laverdière, O., Morin, A. J., & St-Hilaire, F. (2013). Factor structure and measurement invariance of a short measure of the Big Five personality traits. *Personality and Individual Differences*, 55(7), 739-743. <https://doi.org/10.1016/j.paid.2013.06.008>
- Linnenbrink-Garcia, L., Durik, A. M., Conley, A. M., Barron, K. E., Tauer, J. M., Karabenick, S. A., & Harackiewicz, J. M. (2010). Measuring situational interest in academic domains. *Educational and psychological measurement*, 70(4), 647-671. <https://doi.org/10.1177/0013164409355699>
- Linnenbrink-Garcia, L., Patall, E. A., & Messersmith, E. E. (2013). Antecedents and consequences of situational interest. *British Journal of Educational Psychology*, 83(4), 591-614. <https://doi.org/10.1111/j.2044-8279.2012.02080.x>
- Lounsbury, J. W., Sundstrom, E., Loveland, J. M., & Gibson, L. W. (2003). Intelligence, "Big Five" personality traits, and work drive as predictors of course grade. *Personality and Individual Differences*, 35(6), 1231-1239. [https://doi.org/10.1016/S0191-8869\(02\)00330-6](https://doi.org/10.1016/S0191-8869(02)00330-6)
- McCrae, R. R., & Costa, P. T. (2003). *Personality in adulthood: A five-factor theory perspective*. Guilford Press.
- Mahama, I., Dramanu, B. Y., Eshun, P., Nandzo, A., Baidoo-Anu, D., & Amponsah, M. A. (2022). Personality Traits as Predictors of Self-Regulated Learning and Academic Engagement among College Students in Ghana: A Dimensional Multivariate Approach. *Education Research International*, 2022, 1-12. <https://doi.org/10.1155/2022/2255533>
- Nunan, D. (2014). Beyond the classroom: a case for out-of-class language learning. In *National Symposium on Japanese Language Education (NSJLE)*, University of Technology, Sydney.
- O'Connor, P. J., Stone, S., Walker, B. R., & Jackson, C. J. (2017). Deviant behavior in constrained environments: Sensation-Seeking predicts workplace deviance in shallow learners. *Personality and Individual Differences*, 108, 20-25. <https://doi.org/10.1016/j.paid.2016.11.062>
- Pugh, K. (2002). Teaching for idea-based, transformative experiences in science: An investigation of the effectiveness of two instructional elements. *Teachers College Record*, 104(6), 1101-1137. <https://doi.org/10.1111/1467-9620.00198>
- Pugh, K., Bergstrom, C., Wilson, L., Geiger, S., Goldman, J., Heddy, B., & Kriescher, D. (2019). Transformative Experience: A Critical Review and Investigation of Individual Factors. In M. Spector, B. Lockee, & M. Childress (Eds.) *Learning, Design, and Technology: An International compendium of theory, research, practice, and policy*. Springer. https://doi.org/10.1007/978-3-319-17727-4_155-1
- Pugh, K. J., Bergstrom, C. M., & Spencer, B. (2017a). Profiles of transformative engagement: Identification, description, and relation to learning and instruction. *Science Education*, 101(3), 369-398. <https://doi.org/10.1002/sci.21270>
- Pugh, K. J., Bergstrom, C. M., Heddy, B. C., & Krob, K. E. (2017b). Supporting deep engagement: The teaching for transformative experiences in science (TTES) model. *The Journal of Experimental Education*, 85(4), 629-657. <https://doi.org/10.1080/00220973.2016.1277333>
- Pugh, K. J., Linnenbrink-Garcia, L., Koskey, K. L., Stewart, V. C., & Manzey, C. (2010). Motivation, learning, and transformative experience: A study of deep engagement in science. *Science Education*, 94(1), 1-28. <https://doi.org/10.1002/sci.20344>

- Qureshi, A., Wall, H., Humphries, J., & Balani, A. B. (2016). Can personality traits modulate student engagement with learning and their attitude to employability? *Learning and Individual Differences*, 51, 349-358. <https://doi.org/10.1016/j.lindif.2016.08.026>
- Rammstedt, B., & John, O. P. (2007). Measuring personality in one minute or less: A 10-item short version of the Big Five Inventory in English and German. *Journal of Research in Personality*, 41(1), 203-212. <https://psycnet.apa.org/doi/10.1016/j.jrp.2006.02.001>
- Safari, M., & Mohaghegh Montazeri, M. (2017). The effect of reducing lexical and syntactic complexity of texts on reading comprehension. *Teaching English as a Second Language Quarterly (Formerly Journal of Teaching Language Skills)*, 36(3), 59-83. <https://doi.org/10.22099/jtls.2017.26325.2324>
- Salgado, J. F. (2002). The big five personality dimensions and counterproductive behaviors. *International Journal of Selection and Assessment*, 10(1-2), 117-125. <https://doi.org/10.1111/1468-2389.00198>
- Thalmayer, A. G., Saucier, G., & Eigenhuis, A. (2011). Comparative validity of brief to medium-length Big Five and Big Six personality questionnaires. *Psychological assessment*, 23(4), 995. <https://doi.org/10.1037/a0024165>
- Tulis, M., & Fulmer, S. M. (2013). Students' motivational and emotional experiences and their relationship to persistence during academic challenges in mathematics and reading. *Learning and Individual Differences*, 27, 35-46. <http://dx.doi.org/10.1016/j.lindif.2013.06.003>
- Ye, J., Liu, X., Wei, J., & Zhang, Y. (2022). The Role of Students' Situational Interest in Classroom Learning: An Empirical Study based on both Laboratory and Naturalistic Paradigms. *bioRxiv*. <https://doi.org/10.1101/2022.09.17.508364>
- Yildiz Durak, H. (2023). Role of personality traits in collaborative group works at flipped classrooms. *Current Psychology*, 42(15), 13093-13113. <https://doi.org/10.1007/s12144-022-02702-1>
- Zarei, A. A., & Amani, M. A. (2018). The effect of online learning tools on L2 reading comprehension and vocabulary learning. *Teaching English as a Second Language Quarterly (Formerly Journal of Teaching Language Skills)*, 37(3), 211-238. <https://doi.org/10.22099/jtls.2019.32248.2637>
- Zare, M., Barjesteh, H., & Biria, R. (2021). The effect of critical thinking-oriented dynamic assessment on Iranian EFL learners' learning potential: A study of reading comprehension skill. *Teaching English as a Second Language Quarterly (Formerly Journal of Teaching Language Skills)*, 40(2), 193-227. <https://doi.org/10.22099/jtls.2021.39475.2935>