



The Interplay of Gender, L2 Grit and Academic Buoyancy Among Iranian Junior High-School Students: A Positive Psychology and Control Value Theory Perspective

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Abstract

Understanding the role of positive emotions and their contributions to the learners' overall academic success and well-being is of utmost importance. To this end, by following positive psychology and control-value theory, the researchers explored the relationship between two under-researched factors dwelling within the realm of L2 emotions and goal achievement, i.e., L2 grit and academic buoyancy. To this end, 263 junior high school students were surveyed via L2 grit and academic buoyancy scales. The results of the analyses of correlation, regression, and MANOVA revealed that L2 grit is significantly correlated with L2 buoyancy with the strong predictive power of its underlying components. Analyses also indicated that males and females significantly differ in their level of grit. The findings imply that acknowledging the presence of grit and academic buoyancy in language learners would possibly lead to positive outcomes.

Keywords: L2 grit, L2 academic buoyancy, positive psychology, control-value theory, L2 emotions

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Introduction

Regardless of the role that teachers and students play within the educational milieu, guaranteeing their personal best and overall well-being is of utmost importance; however, in applied linguistics, emotions as Swain (2013) put "...are the elephants in the room – poorly studied, poorly understood, seen as inferior to rational thought" (p. 195). In fact, the dominance of cognitive-based studies on one hand (Richards, 2022) and the absence of objectivity in measuring the very flowing and unpredictable nature of emotions on the other (Dewaele, 2021) were among the reasons for which this research trend was marginalized. However, in recent years, the tip of the iceberg has been revealed (Agudo, 2018). Six years after Swain's metaphor, Prior (2019) signals that the field of Second Language Acquisition (SLA) and applied linguistics now enjoy an acceptable rate of emotion-based studies, and Dewaele (2019) argues that the so-called *room* has turned into a farm filled with flying elephants; however, applied linguists must focus on feeding and taming these elephants and prevent their transformation into fire-breathing dragons.

Theoretically speaking, the introduction of Positive Psychology (PP) (Seligman & Csikszentmihalyi, 2000) as a branch of humanistic paradigm and value-laden schools of thought (Prinzing, 2021) has opened a window through which researchers are able to look upon the status of emotions within various contexts. For instance, drawing upon Fredrickson's (2003) "Broaden and Build Theory", MacIntyre and Gregersen (2012) announced the arrival of PP into the realm of applied linguistics by pinpointing five functions of positive emotions, namely "providing opportunities for further thinking and exploring the new experiences, enabling individuals to deal with negative feelings, building resilience within one's characteristic, promoting social bonds, and leading individuals towards greater well-being" (pp. 197-198). In addition, PP enables the scholars to tap into different realms of emotions and high-level mental attributes including empathy, meaning, perseverance, agency, time, hardiness, intelligence, character, and self-factors (MacIntyre et al., 2016). Furthermore, the discussion of educational emotions can be honed by the tenets of Control-Value Theory (CVT) which claims that "most emotions pertaining to students' academic learning and achievement are seen as achievement emotions" (Pekrun et al., 2007, p. 15), which are closely related to the students' perception of achievement and accomplishment. In this vein, positive entities such as enjoyment, pride, and hope along with negative emotions such as anger, frustration, and boredom are believed to be at work simultaneously and the interplay of these emotions leads to students' success or failure (Pekrun et al., 2007). The results of studies conducted in PP and CVT can pave the way for the nullification of anxiety provokers and tensions so that positive emotions such as hope, love, happiness, and joy find their way into different aspects of teachers' and students' lives and add fuel to their overall well-being and life satisfaction. Thus, the present study considers L2 grit and buoyancy to provide more evidence on the multidimensionality of perseverance which is a common construct within both PP and CVT frameworks. As will be discussed, grit refers to one's struggle to achieve a long-term goal by means of remaining interested and consistent in the path while buoyancy indicates one's trial in dealing with the daily challenges of life. The inclusion of grit and academic

buoyancy in psycho-emotional studies such as the present one would possibly add more depth to our knowledge regarding one's perseverance and commitment to fulfilling academic goals. Considering these issues, the present study would seek the answers to the following questions:

- 1) Is there any significant correlation between L2 grit and academic buoyancy?
- 2) To what extent are the components of L2 grit able to predict academic buoyancy?
- 3) Is there any significant difference between male and female EFL learners' grit and academic buoyancy?

Literature Review

Grit

Associated with determinism and zeal, grit refers to the fuel and drive behind one's efforts and consistency in accomplishing tasks and reaching long-term goals despite hardship and challenges (Duckworth, 2016). Gritty and diligent individuals "see life as a long-distance race and show a solid hard-working attitude and responsibility" (Liu, 2021, p. 2). This worldview indicates that being successful is not only a matter of IQ and congenital abilities (Ericsson & Charness, 1994), but also a matter of faith and enthusiasm in one's own abilities and efforts (Pawlak et al., 2021). The concept comprises two components, namely perseverance of effort (POE) and consistency of interest (COI) (Duckworth, 2016). The former refers to the extent to which an individual sustains hardiness and tries not to give up despite challenges, and the latter signals the extent to which a person remains interested in achieving long-term goals. The concept seems to be in relation to other determination-related factors. For instance, as far as academic achievement is concerned, the POE aspect of grit conceptualization has been found to play a more significant role than its COI counterpart (Akos & Kretchmar, 2017). The concept is also shown to be correlated with self-efficacy (Usher et al., 2019), engagement (Fosnacht et al., 2018), and motivation (Piña-Watson et al., 2015); however, there have been some findings that signal the unrelatedness of grit to variables such as math and reading ability (Usher et al., 2019).

Compared to psychology, SLA has paid less attention to grit. The relationship between motivation, anxiety, and grit among high and low achievers was the topic of Changlek and Palanukulwong (2015), where high achievers reflected more grit. In another study, Wei et al. (2019) looked at the effect of grit on foreign language performance concerning the mediating role of classroom environment and foreign language enjoyment in a Chinese context. The results indicated that grit has an effect on both foreign language learning performance and enjoyment; however, these inferences were not confirmed in the follow-up study conducted by Khajavy et al. (2020) where the researchers shed light on the relationship between grit and language mindsets among a sample of 1,178 university students in Iran concluding that easy tasks may not trigger grit and that individuals can fulfill easy tasks in the absence of grit and consequently suggested that high levels of grit seem to be

ineffective and even maladaptive if the pre-requisites such as minimum ability and self-regulation are absent. Moreover, Feng and Papi (2020) explored the relationship between grit, future L2 selves, L2 persistence, and motivational intensity among 94 university students. The analyzed data revealed that only POE had predictive power for motivational intensity and L2 persistence.

Due to inconsistent results from domain-general measures of grit, Teimouri et al. (2022) studied grit in relation to other motivation-related factors (i.e., intended effort, willingness to communicate, attention, and teacher perception). They were on the pursuit of a domain-specific grit scale, and fulfilled their goal by demonstrating that grit is positively correlated with language achievement. Their results were in line with Lee's (2022) study where grit was probed within 647 EFL learners at secondary and tertiary levels in South Korea. More recently, Thorsen et al. (2021) reported on the status of grit in different performance domains including English, Swedish, and Mathematics using path analysis on the data obtained from 4646 students. Results indicated that both facets of grit, i.e., interest and effort, predict grades in Swedish and math, but only the interest aspect of grit predicted the scores in English. Next comes the results of Li and Li (2021) who labeled general grit and L2 grit as significant predictors of language achievements. Accordingly, grit and classroom environment were jointly and independently able to predict foreign language classroom anxiety in the large-scale study run by Li and Dewaele (2021) in a Chinese context where 1526 secondary students were investigated. In yet another study using a qualitative approach, Freiermuth et al. (2021) found that "gritty L2 students enjoy learning the L2, are consistently curious about the L2, are generally not bored by the L2, are confident using the L2, are extraverted—encompassing a strong willingness to communicate, have focused L2 vision, and have had experiences and/or encounters that bolstered their L2 grittiness" (p. 133).

Academic Buoyancy

Academic buoyancy refers to one's capability in coping with everyday academic and school life tensions and challenges triggered by poor performance, competing deadlines, difficult tasks, etc. (Comerford et al., 2015; Martin & Marsh, 2020). According to Martin et al.'s (2010) "5C Model of Academic Buoyancy", the concept comprises control, confidence, co-ordination, commitment, and composure which are believed to be correlated with learning enjoyment and self-esteem (Martin & Marsh, 2006). In a broader sense, academic buoyancy is linked to resilience which similarly reflects one's tenacity and perseverance in stressful and apprehensive situations and signals one's survival strengths and thriving capabilities despite negative feelings and experiences (Connor & Davidson, 2003); however, academic buoyancy is the positive version of resilience, since it builds on strengths and proactive approaches to setbacks (Jahedizadeh et al., 2019). Moreover, the traces of academic buoyancy can be tracked within another area of positive emotions, i.e., hardiness, which signals the existential courage of the individuals in maintaining physical and mental health while facing adversities and challenges and their trial to turn stress into potential advantages (Maddi, 2006). Scholars within this research trend warn us (Zhang, 2021) about the thin borderline that exists between academic buoyancy and two other positive constructs, namely immunity and coping.

According to Hiver (2017), whenever motivation and identity are exposed to tension and challenge, one's immunity comes into play by providing defensive mechanisms to minimize the challenges and disturbances. The defensive mechanisms can manifest themselves in the form of coping strategies that are consciously utilized to nullify the stress or alter its negative effects (Herman et al., 2020).

Considering the interplay of test anxiety and academic buoyancy, Putwain et al. (2015) analyzed the data drawn from 705 students to find out whether there is a reciprocal relation between academic buoyancy and examination performance. The results were positive and indicated that academically buoyant students perform better in high-stake examinations and reflect more resistance to test anxiety. The findings of a mixed-methods research conducted by Comerford et al. (2015) in an Irish context revealed that buoyant students were able to reflect upon their experiences and believed that they had control over their success which was a function of their planning and sustained effort.

Applied linguistics, however, suffers from a dearth of research as far as language teachers' and learners' buoyancy is concerned. Yun et al.'s (2018) study is one of the first to face this issue where they shed light upon the status of 787 college-level L2 learners' academic buoyancy in South Korea by structural equation modeling to find links between buoyancy and six hypothesized predictors, namely self-efficacy, self-regulation, persistence, L2 anxiety, teacher-student relationships, and ideal L2 self-concerning students' L2 achievement and grade point average (GPA). The results demonstrated the interrelatedness of the factors and showed that the academic buoyancy of L2 learners is a strong predictor of their achievement in language learning and their grade point average. Moreover, the obtained analysis signaled that the interplay of self-efficacy, motivation, and self-regulation helps the students to "develop buoyancy despite a certain degree of anxiety" (Yun et al., 2018, p. 18).

However, since no robust measure of L2-specific academic buoyancy was available, Jahedizadeh et al. (2019) responded to this call and designed a 27-item questionnaire that probed 316 Iranian university and private institute students' L2 academic buoyancy, and the results reflected that the concept comprises four underlying constructs: (1) sustainability, (2) regularity adaptation, (3) positive personal eligibility, and (4) positive acceptance of academic life. In their conceptualizations, a sustainable learner can handle low scores, teachers' negative feedback, and language learning failures. Regularity adaptations enables one to plan and specify the goals based on personal values. Characteristics such as being autonomous and independent in accomplishing learning tasks, being proud of language learning, being a trustworthy student, etc. have been listed as the properties of positive personal eligibility. The fourth factor, i.e., positive acceptance of academic life is dedicated to "delighting the process of language learning, being able to find different solutions to a single problem, handling the undesirable situations like classmates' negative attitudes and believing in language learning meaningfulness in one's life (Jahedizadeh et al., 2019, p. 7). No significant differences were reported regarding the mediating role of gender; however, the difference has been reported to be significant in terms of sustainability and regularity adaptation and participants' academic degree, i.e., diploma, BA, and MA;

yet, the generalizability of such claims requires more in-depth analyses. Recently, Yang et al. (2022) modeled the interplay of grit, academic buoyancy, and self-efficacy among 824 Chinese and Iranian EFL learners. The results indicated that efficacy and buoyancy would fuel learners' grit and help them to achieve their goals.

Considering grit and buoyancy alongside each other would provide a better picture of one's perseverance which is a common construct within both frameworks, i.e., PP and CVT. Perseverance refers to the continuation of effort for accomplishing goals (e.g., L2 learning) despite adversities and difficulties (*Merriam-Webster Dictionary*, n.d.). It has been argued (MacIntyre et al., 2016, pp. 29-37) that as a positive notion, perseverance includes three underlying factors, namely resilience, hope, and optimism; however, one newly born and "poorly recognized" (Pawlak et al., 2021, p. 11) infant, i.e., grit, has been added to this family. Therefore, the foremost rationale behind the present study is to provide more evidence on the nature of two constructs, i.e., grit and academic buoyancy, which theoretically reflect one's perseverance.

By and large, the manifestations of grit vary in different educational contexts (Cormier et al., 2019), and understanding the role that it plays within various contexts "will offer a new perspective for both language teachers and learners" (Yamashita, 2018, p. 2). In this regard, the present study unravels the status of grit within Iranian junior high school contexts where not only grit but also academic buoyancy has received less attention. To the best of our knowledge, Yang et al.'s (2022) study is the only existing research that aimed L2 grit and academic buoyancy in the Iranian context; however, most of their participants were recruited from higher education context and evidence from Iranian junior high schools in which English is taught as the foreign language is lacking in the literature. Moreover, as noted by Yang et al. (2022), replication studies would help to further validate the previous findings. Furthermore, earlier studies show inconsistent results regarding the role of gender in grit discussions. Girls were grittier than boys in Usher et al. (2019) and Christensen and Knezek (2014); however, in other studies (e.g., Hodge et al., 2018), no significant gender differences were identified. The present study would equally treat each gender to see whether or not there is any difference between males and females by considering Gender Similarities Hypothesis (Hyde, 2005) according to which most psychological variables are perceived similarly across the genders. Whether the same argumentation is applicable to grit and academic buoyancy is yet to be discussed in the literature. Additionally, some scholars believe that treating grit as a higher-order construct seems to be problematic for various reasons (Credé & Tynan, 2021). In one sense, the hypothesized two-layered structure posed by grit research proponents (e.g., Duckworth & Quinn, 2009) is not confirmed through Credé et al.'s (2017) meta-analysis. In another sense, studies have demonstrated that grit is a reflection of one's conscientiousness (Roberts et al., 2009), meaning that "grit and conscientiousness are probably the same constructs with different labels" (Teimouri et al., 2021, p. 159). Further, due to the vague and misleading nature of grit, the predictive power of its components in determining L2 achievement and performance is questionable (Credé & Tynan, 2021; Li et al., 2018) and requires more attention; therefore, this study would follow

Credé et al.'s (2017) suggestion about treating each component of grit separately to see which component outscores the other in predicting academic buoyancy of L2 learners. These unturned stones and the novelty of L2 grit and academic buoyancy in SLA research (Wang et al., 2021) triggered us to revisit the interplay of L2 grit and academic buoyancy.

Method

Participants

263 students (49.8% males, $N = 131$; 50.2% females, $N = 132$) from two Iranian junior high schools with ages ranging from 11 to 15 ($M = 13$) were conveniently drawn from 12 classes (six from each school) and participated in this study. In Iran, junior high schools consist of three levels of students labeled as 7th, 8th, and 9th grades where they are taught English as a foreign language. From each grade, two classes with 23 to 28 students were involved in this study and all the students in each class were surveyed on their perceptions of L2 grit and academic buoyancy.

Instrumentation

L2 Grit Scale

Drawing on Duckworth and Quinn's (2009) conceptualizations of grit, Teimouri et al. (2022) designed and validated a domain-specific L2 Grit Scale which taps into two underlying factors, namely (1) Perseverance of effort (POE), and (2) Consistency of interest (COI) using nine items on a 5-point Likert scale ranging from 1 (*not like me at all*) to 5 (*very much like me*).

L2 Academic Buoyancy

Designed and refined by Jahedizadeh et al. (2019), the L2 Academic Buoyancy is a 27-item on a 5-point Likert scale ranging from 1 (*definitely disagree*) to 5 (*definitely agree*). The scale aims at four aspects of L2 buoyancy, namely (1) Sustainability, (2) Regularity adaptation, (3) Positive personal eligibility, and (4) Positive acceptance of academic life.

Data Collection and Analysis

Firstly, a sample consisting of 30 students was randomly drawn from the schools to participate in the process of translation and back-translation of the scales from English into Persian so that the main participants face no difficulty and ambiguity during the data collection. The results of the pilot study were further analyzed to check the reliability of the scales which were found to be .713 and .872 for L2 grit and academic buoyancy, respectively. The faithfulness of meaning and colloquialness factors were checked with the help of two translators and revised and modified by the experts in the field. After ensuring confidentiality and ethical considerations along with informing the families, the participants were briefed about the study and were added to two WhatsApp groups dedicated to each gender. Further, an electronic version of the questionnaires comprising nine items for grit and 27 items for academic buoyancy was designed using Google Forms and was distributed among all the participants. The participants of the study were expected to

provide the researchers with the completed forms in approximately 10 minutes. After data collection, answers with decreasing, increasing, and constant patterns ($N = 13$) were identified and excluded. The refined data were checked for normality and other assumptions. The final data was ready for three analyses; namely (1) Pearson correlation, (2) linear regression, (3) and Multivariate Analysis of Variance (MANOVA) using SPSS 26.

Results

Prior to answering the questions, the reliability indices for each scale of L2 grit and academic buoyancy were estimated via Cronbach’s alpha showing .739 and .885 respectively. These reliability indices can be considered “appropriate”, as noted by Dörnyei and Taguchi (2009), who believed that a Cronbach’s alpha value of .70 is the adequate reliability index for an instrument. Next, the assumptions of normality, linearity, and homoscedasticity of the data were ensured by checking the status of kurtosis, skewness, and scatter plot which led the researchers to find the answer to the first question by using Pearson correlation to estimate the degree of the relationship between L2 grit and academic buoyancy.

Table 1 shows the results ($r(250) = .626$, representing a large effect size, $p < .05$) indicating that there was a positive and significant relationship between L2 grit and academic buoyancy. Thus, the first null hypothesis was rejected. It is noteworthy that the strength of the relationship was measured using the guidelines proposed by Cohen (1988) who referred to “small $r = .10$ to $.29$, medium $r = .30$ to $.49$, and large $r = .50$ to 1.0 ” (pp.79-81). By and large, the Pearson analysis showed that L2 grit and academic buoyancy are significantly correlated in a linear and positive manner indicating that as one’s grit increases or decreases, the academic buoyancy fluctuates accordingly.

Table 1
Pearson Correlation Between L2 Grit and Academic Buoyancy

		Grit
Buoyancy	Pearson Correlation	.626**
	Sig. (2-tailed)	.000
	N	250

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

The second question was answered using linear regression. As displayed in Table 2., consistency of interest and perseverance of effort entered the regression model on a single step to predict 46.7 percent of academic buoyancy ($R = .684$, $R^2 = .467$).

Table 2
Model Summary for Predicting Academic Buoyancy Through Components Grit

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.684 ^a	.467	.463	10.681

a. Predictors: (Constant), Consistency of Interest, Perseverance of Effort
b. Dependent Variable: Buoyancy

Table 3 displays the ANOVA tests of the significance of the regression model. The results indicated that the overall regression models enjoyed statistical significance ($F(2, 260) = 114.02, p = .000, \eta^2 = .467$) representing a large effect size. Moreover, Table 4 displays the unstandardized (B) and standardized (Beta) regression coefficient and their significance test. The unstandardized and standardized regression weights for the perseverance of grit were .177 and .649 respectively, and they were .222, and .088 for consistency of interest. The t-values for the perseverance of effort were significant ($t = 13.50, p < .05$), whereas the t-value for consistency of interest was not significant ($t = 1.83, p > .05$). Thus, it can be concluded that components of grit significantly predicted academic buoyancy with the perseverance of effort yielding more predictive power than its counterpart.

Table 3

ANOVA Test of Significance Components of Grit Predicting Academic Buoyance

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	26014.074	2	13007.037	114.021	.000 ^b
	Residual	29659.690	248	114.076		
	Total	55673.764	250			

a. Predictors: (Constant), Consistency of Interest, Perseverance of Effort

b. Dependent Variable: Buoyancy

Table 4

Regression Coefficients^a Components of Grit Predicting Academic Buoyance

Model	Unstandardized		Standardized	T	Sig.
	Coefficients		Coefficients		
	B	Std. Error	Beta		
(Constant)	56.795	4.062		13.980	.000
1 Perseverance of Effort	2.384	.177	.649	13.501	.000
Consistency of Interest	.408	.222	.088	1.839	.067

a. Dependent Variable: Buoyancy

MANOVA was run to investigate any significant differences between male and female groups' means on grit and buoyance to probe the third research question. MANOVA combines the dependent variables in a linear manner to produce a combination which best separates the independent variable groups. MANOVA

requires that correlations between any two variables be roughly equal across the male and female groups, i.e., homogeneity of covariance matrices. The results of the Box’s test (Box’s $M = 4.31$, $F = 1.428$, $p > .001$) indicated that the assumption of homogeneity of covariance matrices was retained. Further, the homogeneity of variances was ensured using Levene’s test showing that the assumptions were met for overall grit ($F(1, 261) = .654$, $p > .05$), and buoyancy ($F(1, 261) = 2.17$, $p > .05$).

Table 5 displays the male and female groups’ means of overall grit and buoyancy. The results showed that the male group had higher means than the female group on overall grit and buoyancy. Moreover, Table 6 displays the main results of MANOVA. Based on these results ($F(2, 260) = 6.70$, $p < .05$, partial $\eta^2 = .049$ representing a weak effect size), it can be concluded that there was a significant difference between the male and female groups’ overall means on grit and buoyancy. Thus, the fourth null hypothesis was rejected.

Table 5

Descriptive Statistics of Overall Grit and Buoyancy by Gender

Dependent Variable	Gender	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
Grit	Male	4.072	.055	3.963	4.181
	Female	3.790	.055	3.681	3.898
Buoyancy	Male	4.140	.047	4.047	4.232
	Female	4.025	.047	3.933	4.117

Table 6

Multivariate Tests of Overall Grit and Buoyancy by Gender

Effect		Value	F	Hypothesis	Error	Sig.	Partial Eta Squared
				df	df		
Intercept	Pillai's Trace	.984	8013.351	2	248	.000	.984
	Wilks' Lambda	.016	8013.351	2	248	.000	.984
	Hotelling's Trace	61.641	8013.351	2	248	.000	.984
	Roy's Largest Root	61.641	8013.351	2	248	.000	.984
Gender	Pillai's Trace	.049	6.709	2	248	.001	.049
	Wilks' Lambda	.951	6.709	2	248	.001	.049
	Hotelling's Trace	.052	6.709	2	248	.001	.049
	Roy's Largest Root	.052	6.709	2	248	.001	.049

Table 7 displays the results of the Between-Subjects Effects. Based on these results, and the descriptive statistics displayed in Table 5, it can be concluded that (1) the male group ($M = 4.07$) had a significantly higher mean than the female group ($M = 3.79$) on overall grit ($F(1, 61) = 13.03, p < .05$, partial $\eta^2 = .048$ representing a weak effect size) and (2) there was not any significant difference between male ($M = 4.14$) and female ($M = 4.02$) groups' means on buoyancy ($F(1, 261) = 2.99, p > .05$, partial $\eta^2 = .11$ representing a weak effect size).

Table 7

Tests of Between-Subjects Effects of Overall Grit and Buoyancy by Gender

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Gender	Grit	5.248	1	5.248	13.038	.000	.048
	Buoyancy	.865	1	.865	2.990	.085	.011
Error	Grit	105.066	261	.403			
	Buoyancy	75.505	261	.289			
Total	Grit	4172.926	263				
	Buoyancy	4459.488	263				

Discussion

The domino of L2 emotions led us to a newly debated positive construct, i.e., grit, that as mentioned earlier, is discussed relative to one's overall perseverance. To study this phenomenon, we followed the tenets of positive psychology; however, instead of studying it along with a negative emotion as suggested by MacIntyre et al. (2019), we chose yet another positive and neglected variable, i.e., academic buoyancy from the scope of the control-value theory. In the final run, we had two variables common to both frameworks suffering from the paucity of research. In this journey, the predictive power of one's grit was still in need of further elaborations; hence, the correlation and regression analyses of the present study showed that grit is positively correlated with academic buoyancy and is a significant predictor of it, meaning that in the long run, grit might possibly contribute to the academic achievement of the L2 learners. The results are in line with Yang et al.'s (2022) study where academic buoyancy was reported to be a strong predictor of learners' grit; however, the present results suggest the inverse argumentation as well, implying that learners' grit is also a strong predictor of their buoyancy. Further, it can be argued that the positive significant relationship between grit and buoyancy indicates that any fluctuation in the language learners' grit would possibly lead to fluctuations in their academic buoyancy accordingly. This implies that investing in L2 grit and buoyancy in L2 classrooms possibly adds fuel to the learners' hope, resilience, optimism, etc. confirming what Martin and Marsh (2006) and Martin et al. (2010) previously found regarding the role of buoyancy noting that the construct is related to one's commitment, enjoyment, and self-esteem. From both perspectives,

i.e., positive psychology and control-value theory, positive emotions such as perseverance, enjoyment, and self-esteem are instances of positive academic emotions (Wang et al., 2021) and contribute not only to learners' academic success (Pekrun et al., 2007), but also to their well-being which is the utmost goal of research in the realm of positive emotions where the main trial is to identify and nullify the negative effects of stressors so that positive emotions are built up and broadened which in the long run guarantees both academic and life satisfaction.

It is noteworthy that the results of the current research are in line with those of Credé and Tynan's (2021) warnings where they indicated that the overall structure of L2 grit requires more evidence and reflection. It seems that perseverance of effort properly fits within the theoretical considerations of grit; however, its counterpart; i.e., consistency of interest, suffers in both theoretical and evidential aspects since similar results to Credé et al. (2017) and Feng and Papi (2020) emerged in our study. Academic buoyancy, success, and accomplishment in this regard are a matter of perseverance and mere consistency of interest does not safely guarantee one's fulfillment. A gritty learner seems to be equipped with perseverance and achievement mindset, deals with setbacks more efficiently, builds up resilience, and sustains motivation, hope, and optimism along the journey of language learning; therefore, apart from achieving some academic goals, carving a perseverant and tenacious characteristic into one's identity stone seem to be more important for the learners than being interested in a task for a long period of time. It can be argued that in this sense, grit equals to the consistency of effort, and not interest, within boring and burdensome situations and reflects the quality of one's *not giving up* mindset. The claim is in line with Credé (2018) and Credé and Tynan's (2021)'s arguments where they indicated that consistency of effort is a more reliable sub-component of grit structure due to reflecting more predictive power in different studies and contexts. In this vein, it can further be claimed that being a gritty learner is the prerequisite to being a buoyant one and vice versa. An academic buoyant person, as noted earlier, copes with academic life tensions and competes for the deadlines and tasks (Martin & Marsh, 2020) implying that both grit and buoyancy are the practical aspects of a learner's perseverance and individuals reflecting such characteristics are consciously aware of their capabilities in a learning context and rely on them in challenging situations.

It seems that demographic characteristics such as gender require more consideration in grit and buoyancy literature. As previously mentioned, grit manifests it self variously depending on the context (Cormier et al., 2019). To the best of our knowledge, as far as grit within the educational context is concerned, few studies have focused on the interplay between gender and grit. It is noteworthy that most of the studies have considered domain-general grit and the present study is among the attempts that shed light upon the construct within a domain-specific context by considering the grittiness of students in a language learning situation and treating both genders equally. The obtained analyses show that boys outscore girls in grit implying that if the long-term goal is set to be language learning, males would sustain their effort more than girls, and their fuel for achieving their goals lasts longer. This contrasts with the results of Christensen and Knezek (2014) and Usher

et al. (2019) where elementary, middle, and upper-secondary graders participated in the study and the results indicated that girls reflect more grit than boys. To justify the results, we might mention that both studies used a general-grit scale and their focus was not on domain-specific issues. The participants in Usher et al. (2019) were from diverse cultural and ethnic backgrounds which again implies that the conceptualization of being grit differs from one context to the other. Most of the participants in this study ($N = 152$, 57%) mentioned that they learn a language in private institutes along with their school curriculum. However; for some participants, the school environment was the only way for language learning. As far as L2 academic buoyancy is concerned, no significant differences were identified and both groups were equal in this regard and signaled similar results implying common reasons to grit despite the fact that participants in this study were at junior high school differing from university students studied by Jahedizadeh et al. (2019). Therefore, we might conclude that the perception of buoyancy might be justified concerning Gender Similarities Hypothesis (Hyde, 2005); however, the same justification might not be applicable to grit. In other words, the present results suggest that buoyancy is perceived similarly by males and females, while the perception of grit differs across the genders. To justify this, we might consider the claims that genders enjoy similar effort as far as accomplishing short-term goals are concerned. In this vein, academic buoyant students deal with daily challenges in similar vein; however, in the long-rung when envisioning the utmost goals such as L2 achievement is concerned, they differ in their grit, because maintaining effort and interest for long periods of time might not be the preferred option of all individuals.

The results of the present study and similar ones indicate that as the learners' grit increases, the perception of buoyancy, efficacy, and motivation of the learners would increase accordingly. Therefore, the domino in which grit and buoyancy are in line with other positive notions would possibly support such arguments by pinpointing that the same is true regarding teachers and their perceptions of gritty and buoyant students. However, due to the nature of the present study, one must be cautious about such generalizations, and future studies are needed to reconsider these claims.

Conclusion

This study investigated the relationship between L2 learners' grit and academic buoyancy. The correlation analysis revealed that grit is positively and significantly correlated with buoyancy. Further, we saw that it strongly predicts learners' academic buoyancy. Studying emotion-laden constructs such as grit and academic buoyancy has its own limitation and this research is no exception. Future studies might reconsider the claims posed in the present and previous studies by utilizing more qualitative or mixed-methods solutions. Due to the dynamic and flowing nature of emotional constructs, studying them in a cross-sectional attempt and generalizing the findings might misguide us in understanding them; hence, future studies might follow the tenets of longitudinal research by providing more control over the factors or larger samples focusing specifically on L2 grit. In line with Credé and Tynan (2021), we argue that the available conceptualizations of grit in general and L2 grit in specific is flawed and are subject to reconsideration. Since the

construct has been considered in SLA studies, the more we neglect the misunderstandings rooted in unreliable measures, the more misinterpretations would emerge both in theory and practice. To fill this gap, scholars focusing on this research trend are encouraged to construct a more comprehensive and multilayered measure of L2 grit which suffers less from construct under-representation and reconsider the sub-components of the grit as postulated by the scholars and current literature. Furthermore, future studies might differentiate between the status of L2 grit among those who learn a language only from school and the students that absorb language from both schools and institutions to elaborate on the claim that L2 grit is a luxurious facet of L2 learners where those who attempted courses outside the school environment are grittier; hence, more buoyant learners are compared to the individuals that had no chance to attend supplementary courses outside their school.

Relying on the results of this study and attempts as such, one can argue that both factors are instances of one's perseverance and contribute to L2 achievement and success. In the long run, they would add fuel to the overall motivation, efficacy, and enjoyment; hence, satisfaction and well-being of both language learners and teachers; therefore, conceptualizing grit and buoyancy as the properties carved within the learners' identity and characteristic helps them to remain positive along their road to success and cope with stressful and challenging situations more effectively. This not only keeps the learners aware and immune along the path, but also triggers their teachers' awareness and might positively change their perceptions of drawbacks, adding to their resilience, and nullifying their stress so that the path toward teachers' overall well-being and happiness is paved accordingly.

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