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# Portfolio assessment among upper-intermediate learners: effects on learners' willingness to communicate, grit tendencies, and motivation

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## Abstract

In the current research, the impacts of portfolio assessment (PA) on the grit tendencies, motivation, and willingness to communicate (WTC) of Saudi Arabian EFL learners were examined. The population of this study was fifty-eight EFL learners who were assigned to two groups in order to accomplish this purpose. Following that, both groups were given the WTC, grit tendencies, and motivation pre-tests to gauge the participants' proficiency in the dependent variables. After that, the students in the control group received the instruction without the use of PA, while the experimental group (EG) received treatment utilizing PA. Following the treatment, the two groups completed the WTC, grit tendencies, and motivation post-tests. The results revealed differences between the two groups' post-test scores, with the EG performing better. These findings imply that teachers can exploit portfolios to provide their students with relevant content that will help them improve their language proficiency.

**Keywords:** Grit tendencies, Language learning motivation, Portfolio assessment, Willingness to communicate

## Preliminaries

The objective of PA in teaching is to provide students the ability to reflect on themselves so they may keep track of, evaluate, and do better at their academic performance without having to follow their teachers' instructions (Muin et al., 2021). According to Brown (2004), PA is seen as a continuous process that has attracted a lot of attention, particularly when it comes to communicative language instruction. In contrast to typical exams, portfolios allow students to be evaluated holistically and provide them with the opportunity to expand on their language learning experience. As a result, students can eventually become independent and responsible learners based on the information, abilities, and methods they pick up under their teacher's direction (Reardon, 2017).

The use of PA encourages students to reflect on themselves and gives educators and students insightful feedback. Additionally, it makes it possible to evaluate a wider variety of competencies (Virgin & Bharati, 2020). According to Gamiz-Sánchez et al. (2016), a

portfolio is a deliberate compilation of student work that demonstrates their attempt, development, and performance in one or more domains. Thus, the fundamental idea behind a portfolio is to empower pupils to get more self-directed students and to assume accountability for their own education. Portfolios are seen as learner-based rather than instructor-based, which is thought to be the major prominent quality of portfolio as a reflective instrument, given that students are taking on more accountability and becoming self-determined in their learning (Boumediene et al., 2016). The use of language portfolios by educators and students is relatively new, having begun in the mid-1990s (Gonzalez, 2008). However, professionals in other fields, like artists, designers, and architects, have been using them for a longer time to gather examples of their work and record their accomplishments.

Using PA can influence grit tendencies of the students. Researchers have become interested in grit because it is a non-cognitive skill that can affect an individual's happiness or success (Wang et al., 2021). Cross (2014) defined grit as the capacity to endure hardships while holding onto a desire for long-term goals. Choi (2020) said that grit encompasses not only an individual's resilience against failure but also their tenacity in achieving a goal through unceasing effort. Based on Duckworth (2016), growth, tenacity, and resilience are the elements of grit. Baquerizo (2018) contended that grit is inconsistent and can result in necessary outcomes through educational and environmental interventions.

L2 grit for learners is an amalgamation of persistence in trying and craving for long-lasting objectives. Research on this construct has shown that it is strongly correlated with other constructs related to teachers and students, which contributes to the success of education (Sudina & Plonsky, 2021; Sudina et al., 2021). L2 grit and its contribution to academic accomplishment and language evaluation are particularly significant since students' success in language acquisition is largely based on their work and desire for long-term objectives (Zheng et al., 2022). As stated by Lan (2022), having high level of grit help people have optimistic attitudes towards their careers. From an alternative viewpoint, the personality attribute of grit enables people to focus their attention and discern between goals that are high- and low-priority (Shirvan & Alamer, 2022; Vadivel et al., 2021). As important as skill, grit may ensure that students succeed and produce more than their innate or natural capacity (Kolganov et al., 2022; Liu et al., 2021).

The idea of grit, which is referred to a person's willingness to work for a long-term objective, is strongly linked to intrinsic drive. Grit is a key component of student engagement and academic achievement. It is described as enthusiasm and persistence in attaining long-standing purposes (Tang et al., 2019). Therefore, it is presumed that people who not only put in more effort but also like what they do have a greater probability of overcoming potential challenges and producing positive outcomes (Tototy et al., 2021). According to studies, grit and age and educational attainment are strongly correlated. Grit has been demonstrated to be an accurate indicator of improved learning results in the realm of education (Chua et al., 2020).

PA has an impact on EFL learners' WTC. According to Öz et al. (2015), WTC is a multifaceted construct that may explain, predict, and describe language students' communication behaviors in a second language (L2). It includes emotional, social-psychological, linguistic, and communicative characteristics. Being prepared to communicate when given the opportunity is known as L2 WTC. WTC essentially explains

why some people actively seek up speaking chances, while others shy away from them and would much rather keep quiet (MacIntyre et al., 2019). L2 WTC is crucial to L2 learning since it has an impact on how much is discussed in the classroom. The link between positive factors and L2 WTC has become popular topics of discussion amongst L2 academics because of the critical role that these variables play in L2 communications (Wang, 2017).

Since the desire to communicate may result in genuine communication behavior, which increases foreign language competency, MacIntyre and Wang (2021) identified WTC as the primary goal of foreign language acquisition. WTC was first thought to be a stable personality trait that held true over time and in many environmental settings. However, based on Lee et al. (2020), in more recent times, L2 WTC has been described as a situational feature as well as a stable predisposition toward communication. Scholars now think that learners' L2 WTC may be influenced by both external and internal factors, such as social support and intergroup environment, as well as internal factors like L2 motivation and attitude toward L2 (Zhang et al., 2020).

EFL students require an innate motivation to acquire English. Students' motivation is seen to be a fundamental issue in their performance when learning English (Namazian-dost et al., 2019). Motivation is closely related to learning activities since it is the center driving force that sustains these activities, gives them direction, and inspires them in order to achieve desired outcomes (Nugraha et al., 2021). According to Purnama et al. (2019), motivation may also be described as a person's behavior direction or as the reason behind a behavior's desire to be repeated. It could have a major role in education. On the other hand, students that receive motivation will be enthusiastic about their studies and will be driven to learn English well (Jaelani et al., 2022).

According to Muslim et al. (2020), integrative and instrumental factors are the two main components of motivation for learning a foreign language. Gardner (2010) defines motivation as the synthesis of both external and internal factors that encourage students to participate in the learning process. Additionally, he stated that pupils' integrative drive reveals their inclination to integrate into a situation including a foreign language (Ter et al., 2019). Additionally, students' positive attitudes regarding the learning environment have an impact on their drive to integrate and their sense of academic fulfillment (Hashemifardnia et al., 2019; Khodadad & Kaur, 2016). Additionally, Pavelescu (2019) made the point that students' integrative motivation is influenced by the zeal, inspiration, and support of their professors. On the other side, instrumental orientation is referred to desire of the students to succeed in learning a foreign language in order to get financial or social rewards. Sallang and Ling (2019) discovered a substantial correlation between instrumental motivation and providing good feedback to students in an educational setting. This is because positive feedback increases students' drive to complete tasks.

The defined variables play an important role in English language learning, so working on them is very significant. The results gained from this study can be significant for EFL teachers and learners. In addition, the significance of this study is that it includes three psychological factors (grit tendencies, motivation, and WTC) as its dependent variables. Regarding the importance of the mentioned variables, the present study aimed at exploring the effects of PA Saudi Arabian EFL learners' grit tendencies, motivation, and WTC.

## Review of the literature

### Theoretical background

#### *Portfolio assessment*

Portfolios are physical or electronic dossiers with student-written screenplays. These scripts are carefully chosen and frequently accompanied by a diary of reflection. PA is often regarded as superior to the more prevalent, product-focused standardized examinations in the field of education (Kirkpatrick & Gyem, 2012; Mphahlele, 2022). The benefits of portfolio-based instruction have been the subject of abundant investigations in foreign/second language education. These studies have focused on the positive experiences L2 teachers have had with PA in a variety of contexts (Lee, 2017); the role that PA plays as a mediator in revising works-in-progress; and the impact of the portfolios on L2 learners' independence, social consciousness, self-regulated learning, and metacognitive consciousness (Azizi & Namaziandost, 2023).

In spite of the stated instructional advantages, PA has remained greatly contentious in actual class settings thanks to the rigidity of L2 instructors, low student involvement, insufficient literacy in language assessment, comprehensive and complex grading, and the test-driven (Gan & Lam, 2020) dominant culture in most instructional settings (Lam, 2018). Consequently, there have been several challenges in completely integrating PA in L2 situations, leading Hyland and Hyland (2019) to request further in-depth research on these matters. From a pedagogical perspective, L2 writing is redefined as a metacognitive and recursive activity that includes L2 students in regular reflection on their language improvement via the process-oriented peer evaluation method (Lam, 2020).

Second-language students learn best when they actively generate their knowledge of the target language via social connections rather of merely receiving it, according to Vygotsky's (1987) social constructivism model of learning, which also forms the basis for portfolio-based evaluation. Writing portfolios, for example, helps L2 learners better understand writing as a socially situated practice in academic discourse groups (Duff, 2010). Thus, it may assess the growth of L2 writers' lower-level writing skills, such writing mechanics and punctuations, as well as their higher-level writing skills, like textual and discursive writing (Steen-Utheima & Hopfenbeck, 2018).

Kusuma et al. (2021) stated that effective learner involvement is contingent upon L2 learners' comprehension of the objectives as expressed in their portfolios, their ability to see the differences between their existing circumstances and those objectives as well as how to achieve those objectives. Similarly, it is suggested that L2 writing educators support students' self-reflection by providing scaffolding for the entire PA process via tutorials (Rezai et al., 2023), utilizing prompts and examples, extending deadlines to increase student engagement, and revealing the assessment rubrics to students (Lam, 2020).

Critical reflectivity theory, which includes exposing knowledge claims to appropriate intellectual scrutiny, as one would do with any assertion in the field of study or theory in one's specialty, provides support for our work (Andresen, 2000). Because their creation necessitates reflection on what one teaches, how one teaches, why one teaches that way, how effective that is, and, if necessary or desired, effectively communicating that to others, teaching portfolios may be especially appropriate for accessing such knowledge claims (Babin et al., 2002). Practitioners are said to find that this kind of introspection is crucial for documenting their knowledge and growth in a dynamic and organized

manner. It helps us to be conversationally present in our instructional lives: responsible, evaluable, and debatable (Brown, 2000).

### ***Willingness to communicate***

Even though many language learners score highly on several language acquisition assessments, a large number of them seldom engage in L2 conversation. This problem demonstrates that there is an additional concept that stands between the ability to communicate and the ability to put this ability into practice (Dörnyei, 2005). WTC is the name of this edifice. MacIntyre et al. (1998) introduced the construct of WTC in the research on foreign language acquisition. Using an L2, they described this idea as being prepared to join the conversation at a certain moment with a specific person or people.

WTC was also described by Fadilah (2018) as a consistent inclination toward communication when given the freedom to choose. Kurk (2019) further said that the term "WTC" describes a learner's cognitive preparation for using the target language in his communications. As the intention to communicate can lead to genuine communicative behaviors, which increases foreign language competence, MacIntyre and Vincze (2017) viewed WTC as the primary goal of language acquisition. The WTC of foreign language learners has been inspected from trait-like and dynamic, as well as situational dimensions, in accordance with MacIntyre et al.'s (1998) model (Dewaele & Dewaele, 2018). Foreign language anxiety, motivation, and self-confidence are connected with the trait-like or psychological dimension of WTC (Lee & Hsieh, 2019). However, the social and contextual aspects of education, such as instructors, cooperative peers, themes of interaction, interlocutors (Fadilah, 2018), and Mystkowska-Wiertelak and Pawlak (2016), are referred to as the dynamic and situational components of WTC (Zarei et al., 2019).

Many investigators have recently become interested in the topic of WTC. Since the theory's inception, researchers have started examining the ways in which individual characteristics including gender (Lee et al., 2020), age (Yekimov et al., 2021), anxiety related to learning a foreign language, and motivation for language acquisition (Kruk, 2022). At the same time, researchers have started to see that WTC may be concentrated on dynamic factors like the function of online resources (Nugroho, 2021).

### ***Grit***

The ability to tolerate complexity while holding onto the optimism of long-term aims is known as grit (Cormier et al., 2019). Based on Karlen et al. (2019), grit also involves working tirelessly toward goals and sustaining interest and effort throughout time in spite of setbacks, failures, and stagnation in one's development. They divided grit into two categories: constancy in pursuit of goals and tenacity while facing the problems. Teimouri et al. (2020) emphasized these components as well, using the Grit Scale as a tool for quantifying the grit concept. Wang et al. (2020) emphasized that grit is a dynamic notion that can be taught, and many educational institutions use teaching courses to help students become more grit-filled. Students' educational attainments are greatly impacted by grit, a non-cognitive trait.

Heydarnejad et al. (2022) clarified this matter and emphasized the need to define and analyze grit as a domain-specific concept, saying that "the domain specificity of grit is a significant theoretical question that ought to be answered in future studies (p.

55)." Within the research community, there is an implicit assumption that pursuing long-term objectives with perseverance and passion is a generally universal tendency. However, it is probable for someone to display extreme grit in their personal life but none at all in their personal relationships. In a similar vein, someone could consider themselves to be gritty when it comes to a serious hobby but not when it comes to their work (Ivcevic & Brackett, 2014). We assume that respondents integrate behavior across domains when reporting their grit levels on the self-report instruments currently in use, but we cannot be certain. Future research is required to examine the differences between grit's domain-specific and domain-general components (Liu, 2022).

The concepts of grit-resilience, perseverance, self-discipline, and caution have previously been noted as being essential for educational success. Resilience in an educational setting is regarded as the capability to adjust constructively in facing dreadful circumstances. This is seen to be the primary factor motivating pupils to accomplish (Feng, 2020). Furthermore, Wang et al. (2020) found that some difficult materials reduced teacher resilience in their investigation of the resilience of Chinese and Iranian EFL teachers. According to their findings, personal qualities are the major factors that sustain instructor resilience, as seen by the realization of both Chinese and Iranian EFL instructors. Environment-based, system-based, and process-based elements were seen to be less of a challenge for teacher resilience, along with other difficulties.

A few studies on the important factors influencing pupils' language proficiency have been carried out recently. Shechtman et al. (2013) emphasized the importance of grit in language instruction setting. Furthermore, their research demonstrated a significant connection amongst grit, persistence, and tenacity and language acquisition success. Keegan (2017) showed a strong correlation between achievement and grit in his research. She made the point that including more student reflection into all evaluations and activities in L2 classrooms helps foster grit.

According to Lee and Draji (2019), students who want to start communicating in a foreign language must possess a great deal of fortitude. According to Teimouri et al. (2021), learners' purpose to communicate, grammar, and speaking overall scores are positively correlated with grit. Their results validated the theoretical foundations of grit in foreign languages. According to their argument, learners who exhibit higher degrees of grittiness are typically more engaged intellectually when completing activities in a foreign language setting.

Grit has predictive validity for language learners' achievement (Alamer, 2022). His research showed that language learners who possess grit linked to language in an academic setting are often more successful in language contexts than language learners who possess a lot of grit unrelated to language other than language studies. It has lately been considered how learners' emotions and grittiness relate to one another. Heydarnejad et al. (2022) discovered through structural equation modeling that resilient learners had a higher chance of conquering their anxiety related to foreign languages in educational settings. They clarified the connection between grittiness and anxiety using Attentional Control Theory. They contended that the Attentional Control Theory explains why worried students have low levels of grittiness and confidence, which lead to deficiencies in a learning environment.



Liu (2022) verified the connection between learners' motivation and grittiness as well. He made the case—based on the broaden-and-build model—that students who are in a supportive and upbeat learning environment are grittier at completing assignments. According to him, expectancy-value theory might potentially explain this relationship by claiming that pupils who reveal greater levels of grittiness are more likely to explore the purpose of the assignment and to encourage their own motivation. Positive relationship exists amongst grit and the best L2 self (Feng & Papi, 2020). In a different study, Lee and Hsieh (2019) discovered a strong correlation between grit and self-confidence when learning a language. Additionally, they noted that in both traditional and online classroom settings, hard-working, self-assured students are more likely to strike up conversations in English.

### **Motivation**

Since motivation is one of the most often used concepts by both instructors and students to describe what leads to success or failure in learning, it is crucial in language instruction (Wang & Guan, 2020). In fact, motivation serves as both the initial spark for learning a foreign or second language and, subsequently, the main engine for completing the drawn-out and sometimes arduous process of language acquisition (Orzechowski et al., 2020). As noted by Dornyei (2009), even the most gifted people are unable to achieve long-term objectives without a strong sense of desire.

Motivation and academic success are related, particularly in language learning programs where students engage with the target language communities infrequently. This is because motivated pupils are more likely to engage in class and be prepared, which permits them to study more material that will aid them achieve their language learning objectives (Baxtiyarovna, 2023). Consequently, motivation is viewed as an intrinsic factor that enhances students' potential for success. It is crucial to keep in mind, nevertheless, that the motivation behind learning a foreign language is multifaceted, since each student possesses a different level of desire upon entering the classroom. Because of this, educators need to be imaginative in order to tailor their lesson plans to the needs and objectives of their pupils (Dörnyei, 2018).

As accomplishment requires a willingness to act, motivation is often considered a critical factor affecting performance in the majority of learning areas. Without this drive, someone might not even attempt to reach their objective (McCoach & Flake, 2018). In a foreign language learning situation where pupils seem to be emotionally and physically isolated from the L2 group, student motivation therefore decides whether they succeed or fail (Thohir, 2017). This suggests that motivated language learners are likely to pick up a second language regardless of their level of linguistic ability. However, even brilliant people cannot accomplish any L2 goals if they lack drive (Bachtiar, 2022). Motivated learners are cognitively ready to learn new things, and because of their passionate participation, they create an engaging and dynamic learning environment in the classroom (Filgona et al., 2020). Unmotivated pupils, on the other hand, just show up for class and don't really intend to learn anything.

One area of language studies that is particularly impacted by these changes is the L2 motivation. Motivation is the core factor that drives pupils to work hard when learning a new language in a classroom setting (Jiang & Zhang, 2019). Rasool and Winke (2019)

asserted that learners are more motivated to master English due to its global status as a language. Therefore, it is advised that research on L2 motivation adopt a dual viewpoint, whereby learning foreign languages is prioritized at one level and English language acquisition at another (Erickson et al., 2022).

It is further argued that, in light of the English language's recent rise to prominence globally, Wang and Li's (2019) socio-educational model has to be reconsidered in order to gain a deeper comprehension of L2 motivation, mostly with regard to integrative motive. Gardner's socio-educational model states that motivation—which consists of three primary elements—is what propels learning a second language. These components include effort, desire expression, and passion. First, they make an effort to learn the English language (Ji et al., 2022). This suggests that a constant and persistent attempt is being made to learn the language. Second, the motivated person wants to accomplish the aim of mastering English. This individual will declare their want to succeed and their determination to succeed (Alloh et al., 2021). Thirdly, the motivated person will start to welcome the obstacles that come with learning a language (Alamer & Al Khateeb, 2023). The elements of Gardner's model are useful markers for distinguishing between individuals who are highly and poorly motivated. Experts cannot agree on which of the many elements that drive people's motivation is the most significant (Al-Jarf, 2023). A common topic of discussion is the comparison of extrinsic and intrinsic factors, as well as instrumental and integrative variables. Nonetheless, research in the areas that incorporate several motivating factors is still scarce.

### **Empirical studies**

Regarding the effects of PA on English language learning, some empirical studies were carried out, for instance, Nassirdoost and Mall-Amiri (2015) investigated how PA affected the motivation and vocabulary success of EFL learners. Sixty students aged fifteen to twenty were chosen as representative samples. The participants' knowledge of the vocabulary items that were supposed to be trained and assessed in the pre-test was verified. Furthermore, it was demonstrated that the motivations of the two groups were identical. The same course materials were used in 12 sessions by the CG and EG. The EG was requested to create a portfolio in place of the conventional assessment that was given to the control group. Immediately following treatment sessions, they were given two post-tests measuring motivation and vocabulary accomplishment. The application of PA significantly improved EFL learners' vocabulary success, but had no influence on their level of desire, according to quantitative study.

In Iranian setting, Hosseini and Ghabanchi (2014) made an effort to examine the impact of PA on EFL students' motivation and reading skills. It used the pretest-treatment-posttest paradigm as part of a quasi-experimental approach. The researchers gathered the participants' triangulated data in order to accomplish their goal. There were sixty-five female undergraduates with translation majors. The EG's integration of a portfolio into their learning strategy-based education was the only distinction between the two groups. The motivation questionnaire and the reading skill test were given to both groups again during the post-testing phase. The motivation test was made more credible by the addition of a self-report evaluation. The results of research showed that PA as a constructivist method increases participants' motivation and reading comprehension.



Furthermore, in another research, Taheri and Mashhadi Heidar (2019) looked at how PA affected the writing skills and self-control of EFL students. In order to do this, 60 intermediate female students were selected. A CG (30 participants) and an EG (30 participants) were randomly allocated to the participants. While members of the EG were instructed and evaluated using portfolio-based instruction and assessment methods, members of the CG received their education and evaluation through conventional means. According to an examination of the study's data, PA significantly improved writing skill ( $p=0.001$ ). Additionally, the results demonstrated that higher self-regulated learners had utilized PA more than lower self-regulated learners ( $p=0.000$ ).

Additionally, Biglari et al. (2021) looked at how PA affected the independence and writing abilities of EFL students. According to the first study question's results, PA significantly and favorably impacted the autonomy of EFL students at both the advanced and upper-intermediate levels. Additionally, the findings showed that PA significantly improved the writing abilities of EFL learners at both the advanced and upper-intermediate levels.

Moreover, the impact of Portfolio-Based Assessment (PBA) on EFL students' writing concepts and methods was investigated by Gebrekidan and Zeru (2023). In order to do this, a total of 60 subjects were randomly selected from the two groups, and four different types of data gathering tools were used: interviews, reflection sheets, essay writing tests, and concepts of writing scale. The findings showed that there were notable differences between the EG and CG participants' ideas about writing and writing performances. The outcomes indicated that PBA supported EFL students' individual and extracurricular learning endeavors, which in turn affected their profound and meaningful ideas of writing.

Literature review shows that using PA is an effective strategy to develop EFL learners' English language learning. Also, it indicates that most studies in the domain of PA were done on English language skills and sub-skills. Few empirical studies were conducted on the effectiveness of PA on psychological variables play important role in language learning. Therefore, this study aimed at examining the impacts of PA on Saudi Arabian upper-intermediate EFL learners' WTC, grit tendencies, and language learning motivation to cover the existing gap.

Three questions and three null hypotheses were posed in this research:

*RQ1* Does PA affect Saudi Arabian upper-intermediate EFL learners' WTC positively?

*RQ2* Does PA affect Saudi Arabian upper-intermediate EFL learners' grit tendencies positively?

*RQ3* Does PA affect Saudi Arabian upper-intermediate EFL learners' language learning motivation positively?

*HO1* PA does not affect Saudi Arabian upper-intermediate EFL learners' WTC positively.

*HO2* PA does not affect Saudi Arabian upper-intermediate EFL learners' grit tendencies positively.

*H03* PA does not affect Saudi Arabian upper-intermediate EFL learners' language learning motivation positively.

## **Methodology**

### **Research design**

A quantitative quasi-experimental design was used in this study. A quasi-experimental design aimed to establish a cause-and-effect relationship between an independent and dependent variables. However, unlike a true experiment, a quasi-experiment does not rely on random assignment. Instead, subjects were assigned to groups based on non-random criteria. The study was quantitative in the first place since it dealt with numerical data, statistical analysis, and interpretation. The study was quasi-experimental as there was no randomization, treatment, or pre-test conditions.

### **Participants**

Out of the 87 pupils registered in Prince Sattam Bin Abdulaziz University in Al-Kharj, Saudi Arabia, 58 male EFL learners were chosen to test the null hypotheses; 29 of them were placed in the control class and the remaining 29 in the experimental class. The participants were selected based on a convenience sampling method. The age range of the subjects was 16–27. The results of a preliminary English exam (PET) showed that the two groups' general English proficiency levels (upper-intermediate) were nearly equal. To ensure consistency in education, the teacher who instructed the two groups in this study was also the same. The teaching approach—portfolio-based vs. non-portfolio—was the only distinction between them.

### **Instrumentations**

The respondents' proficiency level was ascertained by administering a PET. Twenty students who shared the same traits as the target sample made up the sample group used to pilot the exam. The four primary language skills—writing, listening, reading, and speaking—were tested on material taken from actual situations. Three test sections were employed in this study to ensure participant homogeneity. The writing section comprised three parts and seven questions, while the reading section contained five parts and thirty-five reading comprehension questions. In one hour and thirty minutes, the students were supposed to understand the key ideas from journals, signs, and newspapers and be able to employ vocabulary and structural correction. The listening portion took roughly thirty minutes to complete and included twenty-five listening questions. Applying the KR-21 Formula, the test's reliability was estimated to be .79, which appears to be a respectable reliability coefficient.

To evaluate students' grit, the researchers employed the EFL-Grit Scale created by Ebadi, et al. (2018). There are 26 five-point Likert scale items on this Saudi Arabian context-specific grit measure; higher scores indicate grittier students. Using factor analysis, expert opinions, and pilot testing, Ebadi et al. (2018) confirmed the validity of this tool. Furthermore, Ebadi et al. (2018) revealed that the EFL-Grit Scale's reliability was  $\alpha = 0.83$ . Nevertheless, the current study's EFL-Grit Scale reliability was determined to be  $\alpha = 0.91$ .

The other research tool was the Gardner's (2004) Attitude/Motivation Test Battery (AMTB), which was used to determine the participants' motivation for speaking English. There were five options for each of the questionnaire's 26 questions: Highly Disagree, Disagree, No Idea, Agree, and Highly Agree. Four English academics verified the questionnaire's validity, and Cronbach Alpha ( $\alpha = 0.88$ ) was employed to gauge its reliability.

The L2 WTC Scale created by Lee and Hsieh (2019) was used to assess students' overall L2 WTC as well as their L2 WTC both within and outside of the classroom. Higher ratings on this 12-item Likert scale, which has five possible points, indicate that pupils are more willing to speak in their second language (L2). The L2 WTC Scale evaluates L2 WTC in two primary contexts: outside the classroom (6 items) and inside the classroom (6 items) for EFL students. A higher score indicates a higher level of L2 WTC in that specific context. The researchers used the elements of each context separately to determine the students' L2 WTC score in that particular context. According to Lee and Hsieh (2019), the validity of the L2 WTC Scale is deemed satisfactory. The reliability of WTC outside the classroom ( $\alpha = 0.86$ ) and inside the classroom ( $\alpha = 0.91$ ) was calculated using Cronbach's alpha (Lee & Hsieh, 2019). Furthermore, the current study re-estimated the internal consistency reliability coefficient of the WTC in both in-class ( $\alpha = 0.75$ ) and out-of-class ( $\alpha = 0.76$ ) settings. All the instruments were validated by three English professors in applied linguistics. It should be highlighted that the aforementioned questionnaires were used as the pre- and post-tests in this investigation.

### **Procedures and analyses**

The current research used the pretest-treatment-posttest paradigm and a quasi-experimental methodology to evaluate the effects of PA on learners' grit, WTC, and motivation. To serve as the EG and CG, two classes were chosen. To see if the groups were homogeneous with respect to the variables being studied, the researchers gave the WTC, grit, and motivation questionnaires during the pretesting phase. With the exception of portfolio-based education, the teacher, the textbook, and the curriculum were the same for both groups. Ten writing topics and 100 new words were trained to both groups with two different instructional methods. PA was used as a tool to close the gap between evaluation and instruction. The instructor, who was also a researcher, gave the EG an overview of the creation and application of PA at the beginning of the course. As a result, the portfolio-based instruction and the identical activities from the CG were given to the EG. Following two training sessions on portfolio construction and evaluation, the instructor assisted the students in recording their compositions in a chart. Additionally, a few students were required to present their papers to the class and get feedback from their peers. The instructor assessed and assigned grades to the student-generated portfolios based on pre-established standards. Additionally, the teacher assists the students in diagnosing their issues and enhancing their comprehension skills through conferences and comments. It was therefore possible to promote both peer and self-assessment through PA adoption. Furthermore, feedback and feed forward procedures are offered by portfolio-based education. During the post-testing phase, the WTC, grit, and motivation tests were given to both classes. The collected data were then compared and examined using the paired samples t-test and the independent samples t-test (the tables are shown in the results section).

**Table 1** Descriptive statistics of motivation pre-test

Groups	N	Mean	SD	SE mean
CG	29	84.79	9.87	1.83
EG	29	85.72	9.58	1.77

**Table 2** Inferential statistics of motivation pre-test

F	Sig	T	df	Sig. (2-tailed)	Mean difference	SE difference
.02	0.88	– 0.36	56	0.71	– 0.93	2.55
		– 0.36	55.95	0.71	– 0.93	2.55

**Table 3** Descriptive statistics of motivation post-test

Groups	N	Mean	SD	SE mean
CG	29	87.89	8.77	1.62
EG	29	96.24	16.59	3.08

**Table 4** Inferential statistics of motivation post-test

F	Sig	T	df	Sig. (2-tailed)	Mean difference	SE difference
5.57	0.02	– 2.39	56	0.02	– 8.34	3.48
		– 2.39	42.53	0.02	– 8.34	3.48

## Research results

After gathering the required information, it was examined, and conclusions were made. The outcomes of the K-S test depicted that the data had a normal distribution as every one of the Sig. values was more than 0.05. With parametric statistics, the data may be correctly analyzed.

The descriptive information for the two groups is shown in Table 1. While the CG's average is 84.79, the EG's is 85.72. This suggests that the two groups' levels of linguistic motivation were comparable before the intervention.

As seen by Table 2 Sig value (0.71), which is larger than 0.05, there may not be a statistically significant difference between the groups. On the pretest for motivation, they really performed similarly.

The descriptive statistics in the above Table 3 show that the EG's average on the language motivation post-test was 96.24, while the CG's was 87.89. As the mean scores in the above Table 3 show, the two groups had the same level of motivation before receiving the instruction.

Table 4 displays the significant differences between the individuals in the groups. The experimental participants performed better than the CG on the language motivation post-test. The Sig value (0.02) is less than 0.05. This indicates that there is a significant difference between the two classes' performance on the linguistic motivation post-tests, favoring the EG.

**Table 5** Paired samples test of motivation

	Mean	SD	SE mean	t	df	Sig. (2-tailed)
CG pre/post-tests	- 3.10	5.90	1.09	- 2.83	28	0.00
EG pre/post-tests	10.51	15.07	2.79	- 3.75	28	0.00

**Table 6** Descriptive statistics of WTC pre-test

Groups	N	Mean	SD	SE mean
CG	29	37.89	6.29	1.169
EG	29	36.82	6.18	1.148

**Table 7** Inferential statistics of WTC pre-test

F	Sig	t	Df	Sig. (2-tailed)	Mean difference	SE difference
0.21	0.64	0.65	56	0.51	1.06	1.63
		0.65	55.98	0.51	1.06	1.63

**Table 8** Descriptive statistics of WTC post-test

Groups	N	Mean	SD	SE mean
CG	29	40.82	6.85	1.27
EG	29	49.75	7.52	1.39

Table 5 indicates that there is a difference between the CG's pre- and post-intervention results. Similarly, the EG's pre- and post-tests differ from each other. Based on the results, both groups had a development on their post-tests of motivation.

Table 6 indicates that the mean score for the EG is 36.82, whereas the mean score for the CG is 37.89. On the WTC pre-test, it seems that both classes performed nearly identically. To determine whether there were any noteworthy variations between the WTC pretests of the two classes, an independent samples t-test was run on the following table:

Table 7 Sig value, which is more than 0.05, is .51, indicating that the two groups' WTC pre-test findings were identical. Prior to the treatment, their performance of the two groups was actually the same. Before starting the treatment, the participants of both groups had almost the same level of WTC.

Table 8 displays the descriptive WTC post-test findings for each courses. The CG mean is 40.82, whereas the EG mean is 49.75. The EG appeared to do better than the CG on the WTC post-test. This betterment can be attributed to the treatment that they had received. The results of an independent samples t-test show the difference between the two groups in the following table:

Given that Table 9 Sig value is less than .05, it is possible to deduce the statistical significance of the differences between the WTC post-tests of the EG and control group. As it happened, the EG did better on the WTC post-tests than the CG. This improvement might be attributed to the treatment advantages.

**Table 9** Inferential statistics of WTC post-test

F	Sig	T	df	Sig. (2-tailed)	Mean difference	SE difference
0.21	0.64	– 4.72	56	0.00	– 8.93	1.89
		– 4.72	55.50	0.00	– 8.93	1.89

**Table 10** Paired samples Test of WTC

	Mean	SD	SE mean	t	Df	Sig. (2-tailed)
CG pre/post-tests	– 2.93	6.56	1.21	– 2.40	28	0.02
EG pre/post-tests	– 12.93	10.10	1.87	– 6.89	28	0.00

**Table 11** Descriptive statistics of grit pre-test

Groups	N	Mean	SD	SE mean
CG	29	62.62	13.37	2.48
EG	29	61.58	13.14	2.44

**Table 12** Inferential statistics of grit pre-test

F	Sig	T	df	Sig. (2-tailed)	Mean difference	SE difference
0.045	0.83	0.29	56	0.76	1.03	3.48
		0.29	55.98	0.76	1.03	3.48

**Table 13** Descriptive statistics of grit post-test

Groups	N	Mean	SD	SE mean
CG	29	65.89	15.43	2.86
EG	29	89.68	25.18	4.67

Based on the data, the Sig value (0.00) is less than 0.05, meaning that there is a significant difference between the CG's pre- and post-test results. There are also noticeable variations between the pre- and post-test results for the EG class. It is possible to draw the conclusion that both groups' WTC post-test outcomes improved (Table 10).

Table 11 shows that the average for the EG is 61.58, while the average for the CG is 62.62. It seems that the members of both groups had nearly comparable scores on the grit pretest.

Table 12 shows the inferential statistics on the pretests for test grit for the two groups. The pre-test differences between the groups do not reach significance at ( $p < 0.05$ ), as Sig (0.76) is more than 0.05. Regarding the grit pre-tests, both groups did rather well.

The above Table 13 displays the mean scores for the CG and EG, which are 65.89 and 89.68, respectively. It appears that on the grit post-tests, the experimental subjects performed better than the CG.



**Table 14** Inferential statistics of grit post-test

F	Sig	t	df	Sig. (2-tailed)	Mean difference	SE difference
4.13	0.04	− 4.33	56	0.00	− 23.79	5.48
		− 4.33	46.43	0.00	− 23.79	5.48

**Table 15** Paired samples test of grit

	Mean	SD	SE mean	t	df	Sig. (2-tailed)
CG pre/post-tests	− 3.27	8.52	1.58	− 2.06	28	0.04
EG pre/post-tests	− 28.10	25.49	4.73	− 5.93	28	0.00

The inferential statistics for the two classes on the grit post-tests are depicted in Table 14. The significant differences between the classes at ( $p < 0.05$ ) are shown by the Sig value (0.00), which is less than 0.05. The EG fared better than the CG after the intervention.

Table 15 presents a comparison of the grit pre- and post-test findings for the two courses. According to the table, there is a significant difference between the CG's pre- and post-test results. The findings of the EG's pre- and post-test show a similar, noteworthy change.

In short, the results showed that the EG did better than the CG on each of the three post-tests. In other words, the participants in the EG outstripped the CG on the post-tests of WTC, motivation, and grit. It is indicated here that PA is better than traditional assessment for EFL students studying English.

### Discussion and conclusion

Conducting the data analysis and gaining the results, it was shown that the performances of the two groups on the three post-tests were not similar; they had different performances after the termination of the intervention. The mean scores of the EG on the post-tests were higher than the mean scores of the CG, also the sig value was smaller than 0.05. Consequently, it was concluded that there were meaningful differences amongst the post-test results of the two groups in favor of the EG. These findings are in line with those of Nowruzzi and Nafisi (2010), who verified the beneficial effects of PA on the motivation of EFL learners to study the language.

Additionally, Nassirdoost and Mall-Amiri (2015), who looked at the effect of PA on EFL students' word knowledge, support our findings. The usage of PA had a considerable impact on EFL learners' vocabulary attainment, according to their examination of the findings. Furthermore, the present findings are along with the investigation done by Hosseini and Ghabanchi (2014), that showed that the use of PA improved the reading comprehension skills and motivation of EFL learners. The outcomes complement the findings of Roohani and Taheri (2015), who found that the portfolio practice improved pupils' sub-skills of attention, organization, and support when compared to a typical curriculum.

Furthermore, the consequences of this survey are in accord with those of Taheri and Mashhadi Heidar (2019), who looked at how PA affected the writing skills and

self-control of EFL students. Their findings demonstrated how PA improved participants' writing skills. Additionally, they demonstrated how better self-regulated students had utilized PA than less self-regulated students. Additionally, our findings are advocated by Biglari et al. (2021), who looked at the impact of PA on the autonomy and writing abilities of EFL students. They found that PA had a favorable impact on these abilities at both the upper-intermediate and advanced levels.

Furthermore, the outcomes of the research are consistent with Gebrekidan and Zeru (2023) that looked at how PA affected EFL students' ideas and writing processes. They showed that there were notable differences between the ideas of writing and writing performances of the EG and CG. According to their findings, PA supported EFL students' autonomous and extracurricular learning endeavors, which in turn affected their profound and meaningful ideas of writing. Furthermore, our results align with those of earlier research conducted by Khodadady and Khodabakhshzade (2012) and Farahiam et al. (2018). These results supported the beneficial benefits of PBA on learners' autonomy and metacognitive awareness, respectively. Our results are supported by constructivist epistemology that requires us to assess learners' individual performances and group performances together during their learning experience (Shepard, 2000).

Wang and Liao (2008) have reported that PA helped students become more thoughtful about their learning process by supporting the instructor in leading the class toward learning culture instruction as opposed to teacher-centered teaching. These results provide partial support for the study's findings. Furthermore, the consequences of this investigation are matched with those published by Chen (2006), who found that a portfolio was a useful tool. He thought a student's portfolio served as a reliable predictor of obtaining ownership. This aspect is well demonstrated by the way the material of the portfolio is chosen and arranged according to their interests and level of satisfaction.

Students are better equipped to think analytically and critically about the particular information they are studying once they have developed more sophisticated learning techniques. It is possible to conclude, then, that students who utilize portfolios take greater ownership of their education, get a clearer understanding of their strong and weak points, and learn how to set objectives. To put it briefly, portfolios help students develop critical thinking skills and get dynamic, autonomous, and self-reliant students, that aligns with their desire to study a language (Aly, 2000).

PA encourages cooperation, learner agency, and autonomy, all of which may improve motivation and language acquisition. The ability for students to reflect on their own artifacts is another benefit of portfolio-based instruction in the English learning and teaching. Additionally, it can enhance their transferable abilities in teamwork, assessment, critical thinking, and reflection (Tsagari, 2004). The fact that PA might provide students the chance to have some control over what they are taught is another element that may have helped to the greater development of students in the EG (Reinders, 2011). It appears that students' voices are heard during the PA process, and this may be made feasible by their ongoing introspection on their work. Price et al. (2011) state that a reflective portfolio allows students to assess how well they are doing now vs how well they performed in the past. As a result, pupils start to evaluate themselves and track their own development over time. By letting them choose their own work to take charge of revision, giving them the chance to make meaningful revisions, and giving them the time to advance as

authors, take chances with their work, and ask peers for guidance, a portfolio helps students become more involved and autonomous (Hassaskhah & Sharifi, 2011).

Additionally, the learners in the EG received their training in a setting that valued their uniqueness and accepted their suggestions. Additionally, PA offered a collaborative atmosphere as opposed to the competitive atmosphere that characterizes traditional techniques. Collaboratively, the EG participants had a sense of security and comfort that allowed them to take chances and commit errors, perhaps boosting their self-esteem as suggested by Muslim et al. (2020).

Conversely, participants in the CG did not exhibit high levels of motivation, grit, or WTC, most likely as a result of not receiving a system of instruction and learning that included metacognitive awareness, self-evaluation, reflection, and all other necessary components for developing English learning. Another factor that appears to be the most obvious explanation for the low level of motivation, WTC, and grit in CG is that the participants typically relied on their instructor for evaluation; they waited to be instructed and evaluated by the teacher. Thus, learners' expectations of instructor authority may act as a barrier to adopting autonomy, according to Yildirim (2008). The participants cannot be expected to demonstrate autonomy in these contexts because terms like reflection, self-assessment, and goal setting are typically absent. In contrast, these terms are common in portfolio-based assessment contexts because learners typically use them to complete the necessary tasks and activities.

In the current study, it was discovered that PA significantly impacted the WTC, grit tendencies, and motivation of EFL learners. When they had received portfolio-based teaching, the EG participants did better on the WTC and grit assessments. The EG's motivation was enhanced since they also scored better on the motivation questionnaire. Given that the two groups were identical at the beginning of the trial, it can be said that PA positively affects the participants' WTC, grit, and motivation. As a result, PA may be considered a useful instrument for raising participants' WTC, grit, and motivation. To put it briefly, the results of this study support Yang's (2003) assertion that PA has an impact on EFL contexts. The results also support Nezakatgoo's (2011) findings, which emphasized PA's important function in fostering motivation.

To sum up, the study's findings support the following conclusions: PA can, as Lam and Lee (2010) correctly stated, "increase students' choice," "supply a constructive learning situation," "change learners' ingrained attitudes towards the importance of grades," promote students' metacognitive consciousness of learning and language, inspire self-assessment, assist students in discovering their unique learning styles and identifying the language learning techniques that work well for them (Gonzalez, 2008); these are all crucial elements that help learners identify "invisible" learning factors (Herritage, 2010) visible to students during their protracted journey to become fluent in a foreign language, and which may eventually result in students taking charge of their own education and gaining independence.

Regarding the study's consequences, literate evaluation teachers might identify their own areas of weakness and enhance their pedagogical approaches. In order to support individuals who require assistance, they can also assess the learning styles and tactics of the pupils. Furthermore, PA may encourage student voice engagement, especially among contemplative and reticent pupils. It can be a beneficial means for multicultural and

bicultural learners' assessment and instruction. In fact, PA may be a useful substitute tool for teaching and assessment (Al-Mahrooqi & Denman, 2018). PA is important in ethical assessment because, in addition to fostering social equality and fairness in EFL classrooms, it lessens the cultural, linguistic, and normative biases present in standard exams. It also serves as a substitute to the testing culture (Bos & Vaughn, 2002; Brown, 2004).

The present study's findings possess several significant ramifications for stakeholders and EFL language instructors. First, the study's findings suggest that teachers may use assessment as a teaching tool rather than just a means of monitoring students' performance, which challenges the notion that assessment is a stand-alone operation. Second, using a portfolio enhances teacher-student interaction by creating a welcoming and encouraging atmosphere (Marinho et al., 2021). It goes beyond just gathering various samples. Thirdly, it increases learners' metacognitive awareness, which is an essential component of independent learning. Fourth, because students here accept the chance to make mistakes, it reduces the fear that comes with other forms of testing. The study's conclusions may be broadly applicable to any educational environment where the objectives are to support students' critical thinking development, increase learner autonomy, and increase students' knowledge of their own learning processes (Syzdykova et al., 2021).

The results of this survey have some ramifications for language instructors, material creators, and syllabus designers. In terms of the usage of PA, this investigation may assist curriculum makers since it may serve as inspiration for creating a syllabus that incorporates portfolios into instruction. Portfolios are crucial for incorporating student input into the decision-making process (Muin et al., 2021). The current study demonstrated the value and applicability of this strategy, demonstrating that when creating syllabuses, syllabus designers should take learners' rights to goal-setting, feedback, and criticism into consideration. The study's conclusions so suggest that language curricula should be adaptable and take into account students' involvement in decision-making and goal-setting.

The results of this investigation can also help those who create instructional materials, since they should take into account students' performance and allow them to edit and improve their works in order to help them become better writers. Teachers of languages may also find the study's conclusions interesting. They may learn from the results that creating a different kind of assessment, such as PA, enables teachers and pupils to recognize their own strengths and shortcomings and offers necessary revisions (Shen et al., 2020).

The outcomes of this survey may also be utilized to any subject of education where developing critical and autonomous thinkers is the main objective. Students can be motivated to evaluate themselves, apply suitable learning techniques, and strengthen their feeling of accountability for being conscious of their own education. By doing this, kids are better prepared to be independent learners and to grasp the concept of meaningful learning (Wang et al., 2020).

Despite all of these consequences, the study's narrow participant pool and the fact that every participant was enrolled at the same English institution may prevent it from being broadly applicable. Additionally, only WTC, motivation, and grit were considered

among all psychological characteristics. Additionally, issues with educational policy, interpretation, and reliability may surface because PA is essentially a qualitative approach to the participants' assessment. Furthermore, the researchers had to restrict the duration of the study to three months due to scheduling constraints. This would also have an impact on the range of tasks and activities that are used. Lastly, only male students were included in this study in order to maintain gender segregation in the Saudi Arabian EFL environment.

To confirm the results and reach more firm conclusions on the influences of PA on the motivation, grit, and WTC of EFL students, more research is required. For researchers looking at how successful PA is in other domains, such as critical thinking and other learning styles, it can be an excellent idea. Additionally, throughout the process, future researchers might enhance their findings by including an interview part in their study. Next studies can examine the effects of PA on different skills and sub-skills of English language. Also, to give the researcher(s) more precise and broadly applicable findings, the same study can be replicated on a bigger sample of EFL learners.

#### Abbreviations

PA	Portfolio assessment
WTC	Willingness to communicate
EFL	English as a foreign language
PET	Preliminary English exam
AMTB	Attitude/motivation test battery
EG	Experimental Group
CG	Control Group

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#### Author contributions

All authors had equal contribution.

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#### Availability of data and materials

The data that supporting the findings of this study are available from the corresponding author upon reasonable request.

#### Declarations

##### Ethics approval and consent to participate

The study involving human participants did not require ethical review and approval, as it complied with local legislation and university requirements of Saudi Arabia. Written informed consent was obtained from all participants prior to their participation in the study.

##### Consent for publication

Not applicable.

##### Competing interests

On behalf of all authors, the corresponding author states that there is no conflict of interest.

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#### References

- Alamer, A. (2022). Having a single language interest autonomously predicts L2 achievement: Addressing the predictive validity of L2 grit. *System*, 108(2), 1–15. <https://doi.org/10.1016/j.system.2022.102850>
- Alamer, A., & Alrabai, F. (2023). The causal relationship between learner motivation and language achievement: New dynamic perspective. *Applied Linguistics*, 44(1), 148–168.

- Al-Jarf, R. (2023). Learning English by kindergarten children in Saudi Arabia: A mothers' perspective. *Journal of Learning and Development Studies*, 3(2), 15–32.
- Allouh, A. M., Qadhi, S. M., Hasan, M. A., & Du, X. (2021). Teachers' self-efficacy and online teaching during COVID-19 pandemic in Qatari Governmental Schools. *International Journal of Learning, Teaching and Educational Research*, 20(11), 17–41.
- Al-Mahrooqi, R., & Denman, C. J. (2018). Alternative forms of assessment. In J. I. Lontas (Project editor: M. DelliCarpini, Volume editor: C. Coombe), *The TESOL encyclopedia of English language teaching* (1st ed.), vol. 8 (pp. 4851–4856).
- Aly, M. M. (2000). Portfolio assessment: Helping EFL students develop as writers. *Studies in Curriculum and Instruction*, 62, 232–269.
- Andresen, L. W. (2000). A useable, trans-disciplinary conception of scholarship. *Higher Education Research and Development*, 19(2), 137–153.
- Azizi, Z., & Namaziandost, E. (2023). Implementing peer-dynamic assessment to cultivate Iranian EFL learners' inter-language pragmatic competence: A mixed-methods approach. *International Journal of Language Testing*, 13(1), 18–43. <https://doi.org/10.22034/ijlt.2022.345372.1171>
- Babin, L. A., Shaffer, T. R., & Tomas, A. M. (2002). Teaching portfolios: Uses and development. *Journal of Marketing Education*, 24(1), 35–42.
- Bachtiar, B. (2022). The interplay between online learning and students' motivation: A mixed method study. *Jurnal Basicedu*, 6(3), 4701–4711.
- Baquerizo, H. X. (2018). *The impact of grit on student success through co-curricular engagement* (Unpublished Dissertation). Caldwell University. Retrieved 11 March, 2021 from <https://www.proquest.com/openview/2be2a2945178da6689395fb819a9f47d/1?pqorigsite=gscholar&cbl=18750>
- Baxtiyarovna, S. Z. (2023). The role of motivation in second language learning. *Journal of New Century Innovations*, 27(6), 94–96.
- Biglari, A., Izadpanah, A., & Namaziandost, E. (2021). The effect of PA on Iranian EFL learners' autonomy and writing skills. *Education Research International*, 3, 1–13. <https://doi.org/10.1155/2021/4106882>
- Bos, C. S., & Vaughn, S. (2002). *Strategies for teaching students with learning and behavior problem: Interventions for reading comprehension*. Allyn and Bacon.
- Boumediene, H., Berrahal, F. K., & Harji, M. B. (2016). The effectiveness of portfolio assessment on EFL students writing performance: The case of third Year Secondary students in Algeria. *Academic Journal of Interdisciplinary Studies*. <https://doi.org/10.5901/ajis.2016.v5n3s1p119>
- Brown, S. (2000). The institute for learning and teaching and UK approaches to accrediting teaching: Looking to the future. *Medical Teacher*, 22(5), 513–516.
- Brown, H. D. (2004). *Language assessment: Principals and classroom practices*. Pearson Education.
- Chen, Y. M. (2006). EFL instruction and assessment with portfolio: Case study in Taiwan. *The Asian EFL Journal*, 8(1), 69–96.
- Choi, J. (2020). Associations between grit, sustainable behavior, and emotional well-being. *Asian Journal for Public Opinion Research*, 8, 144–159. <https://doi.org/10.15206/ajpor.2020.8.2.144>
- Chua, S. P., YuRong, B. S., & Yang, S. Z. (2020). Social media addiction and academic adjustment: The mediating or moderating effect of grit personality. *International Journal of Psychology and Educational Studies*, 7(3), 143–151. <https://doi.org/10.17220/ijpes.2020.03.013>
- Cormier, D., Dunn, J. G., & Dunn, J. C. (2019). Examining the domain specificity of grit. *Journal of Personality and Individual Differences*, 139(2), 349–354. <https://doi.org/10.1016/j.jpaid.2018.11.026>
- Cross, T. (2014). The Gritty: grit and non-traditional doctoral student success. *The Journal of Educators Online*. <https://doi.org/10.9743/JEO.2014.3.4>
- Dewaele, J. M., & Dewaele, L. (2018). Learner-internal and learner-external predictors of willingness to communicate in the FL classroom. *Journal of the European Second Language Association*, 2, 24–37. <https://doi.org/10.22599/jesla.37>
- Dörnyei, Z. (2005). *The psychology of the language learner: Individual differences in second language acquisition*. Routledge.
- Dörnyei, Z. (2009). Motivation and the vision of knowing a second language. In B. Beaven (Ed.), *IATEFL 2008: Exeter conference selections* (pp. 16–22). Canterbury: IATEFL.
- Dörnyei, Z. (2018). Motivating students and teachers. In J. I. Lontas (Ed.), *The TESOL encyclopedia of English language teaching* (pp. 1–6). Wiley. <https://doi.org/10.1002/9781118784235.eelt0128>
- Duckworth, A. (2016). *Grit: The power of passion and perseverance*. Scribner/Simon & Schuster.
- Duff, P. (2010). Language socialization into academic discourse communities. *Annual Review of Applied Linguistics*, 30, 169–192.
- Ebadi, S., Weisi, H., & Khaksar, Z. (2018). Developing an Iranian ELT context-specific grit instrument. *Journal of Psycholinguistic Research*, 47(4), 975–997.
- Erickson, G., Bardel, C., Österberg, R., & Rosén, M. (2022). Attitudes and ambiguities—teachers' views on second foreign language education in Swedish compulsory school. *LLE*, 2, 157–169.
- Fadilah, E. (2018). Willingness to communicate from Indonesian learners' perspective. *Journal of ELT Research*, 3, 168–185. [https://doi.org/10.22236/JER\\_Vol3Issue2pp168-185](https://doi.org/10.22236/JER_Vol3Issue2pp168-185)
- Faraham, M., Avarzamani, F., & Martínez Agudo, J. D. D. (2018). The impact of portfolio on EFL learners' metacognition and writing performance. *Cogent Education*, 5(1), 1–21. <https://doi.org/10.1080/2331186X.2018.1450918>
- Feng, L., & Papi, M. (2020). Persistence in language learning: The role of grit and future self-guides. *Journal of Learning and Individual Differences*, 81(2), 1–10. <https://doi.org/10.1016/j.lindif.2020.101904>
- Filgona, J., Sakiyo, J., Gwany, D. M., & Okoronka, A. U. (2020). Motivation in learning. *Asian Journal of Education and Social Studies*, 10(4), 16–37. <https://doi.org/10.9734/ajess/2020/v10i430273>
- Gámiz-Sánchez, V., Gallego-Arrufat, M. J., & Crisol-Moya, E. (2016). Impact of electronic portfolios on prospective teachers' participation, motivation, and autonomous learning. *Journal of Information Technology Education: Research*, 15, 517–533.
- Gan, L., & Lam, R. (2020). Understanding university English instructors' assessment training needs in the Chinese context. *Language Testing in Asia*. <https://doi.org/10.1186/s40468-020-00109-y>
- Gardner, R. C. (2010). *Motivation and second language acquisition: The socio-educational model*. Peter Lang.



- Gebrekidan, H., & Zeru, A. (2023). Effects of portfolio-based assessment on EFL students' conceptions and approaches to writing. *Cogent Education*, 10(1), 2195749. <https://doi.org/10.1080/2331186X.2023.2195749>
- Gonzalez, J. A. (2008). Promoting student autonomy through the use of the European language portfolio. *ELT Journal*, 63(4), 373–382.
- Hashemifardnia, A., Rasoooyar, H., & Sepehri, M. (2019). Enhancing Iranian EFL learners' speaking fluency through using task-based activities. *Global Journal of Foreign Language Teaching*, 9(1), 24–32. <https://doi.org/10.18844/gjflt.v9i1.3998>
- Hassaskhah, J., & Sharifi, A. (2011). The role of PA and reflection on process writing. *Asian EFL Journal*, 13(1), 193–231.
- Herritage, M. (2010). *Formative assessment and next-generation council of assessment system: Are we losing an opportunity?* Chief State School Officers.
- Heydarnejad, T., Ismail, S. M., Shakibaei, G., & Saedian, A. (2022). Modeling the impact of L2 grit on EFL learners' self-assessment and foreign language anxiety. *Language Testing in Asia*, 12(1), 1–20. <https://doi.org/10.1186/s40468-022-00200-6>
- Hosseini, H., & Ghabanchi, Z. (2014). The effect of PA on EFL learners' reading comprehension and motivation. *English Language Teaching*, 7(5), 110–119.
- Hyland, K., & Hyland, F. (2019). *Feedback in second language writing: Contexts and issues* (pp. 1–22). Cambridge University Press.
- Ivcevic, Z., & Brackett, M. (2014). Predicting school success: Comparing conscientiousness, grit, and emotion regulation ability. *Journal of Research in Personality*, 52, 29–36. <https://doi.org/10.1016/j.jrp.2014.06.005>
- Jaelani, S. R., Handini, B. S., Prasetyaningrum, A., Mursal, T. H., & Arafah, H. (2022). The Correlation among Grit, EFL Learners' Motivation, and Applied Linguistics on Syntax for EFL Learners. *Pedagogy: Journal of English Language Teaching*, 10(1), 76–84. <https://doi.org/10.32332/joelt.v10i1.4533>
- Ji, S., Qin, X., & Li, K. (2022). Chinese University English teachers' professional learning through academic reading on social media—a mixed-methods approach. *Behavioral Sciences*, 12(10), 390.
- Jiang, A. L., & Zhang, L. J. (2019). Chinese students' perceptions of English learning affordances and their agency in an English-medium classroom context. *Language and Education*, 33(4), 322–339.
- Karlen, Y., Suter, F., Hirt, C., & Merki, K. M. (2019). The role of implicit theories in students' grit and mindset in language learning grit, achievement goals, intrinsic and extrinsic motivation, and achievement in the context of a long-term challenging task. *Journal of Learning and Individual Differences*, 74(2), 101–175. <https://doi.org/10.1016/j.lindif.2019.101757>
- Keegan, K. (2017). Identifying and building grit in language learners. *English Teaching Forum*, 55(2), 2–9.
- Khodadad, M., & Kaur, J. (2016). Causal relationships between integrative motivation, self-efficacy, strategy use and English language achievement. *The Southeast Asian Journal of English Language Studies*, 22(3), 111–125. <https://doi.org/10.17576/3L-2016-2203-08>
- Khodadady, E., & Khodabakhshzade, H. (2012). The effect of portfolio and self-assessment on writing ability and autonomy. *Journal of Language Teaching and Research*, 3(3), 518–524. <https://doi.org/10.4304/jltr.3.3.518-524>
- Kirkpatrick, R., & Gyem, K. (2012). Washback effects of the new English assessment system on secondary schools in Bhutan. *Language Testing in Asia*. <https://doi.org/10.1186/2229-0443-2-4-5>
- Kolganov, S. V., Vadivel, B., Treve, M., Kalandarova, D., & Fedorova, N. V. (2022). COVID-19 and two sides of the coin of religiosity. *HTS Teologiese Studies/theological Studies*, 78(4), 7–21.
- Kruk, M. (2019). Dynamicity of perceived willingness to communicate, motivation, boredom and anxiety in second life: The case of two advanced learners of English. *Computer Assisted Language Learning*, 2, 1–27.
- Kruk, M. (2022). Dynamicity of perceived willingness to communicate, motivation, boredom and anxiety in Second Life: The case of two advanced learners of English. *Computer Assisted Language Learning*, 35, 190–216. <https://doi.org/10.1080/09588221.2019.1677722>
- Kusuma, I., Mahayanti, N. W. S., Adnyani, L. D. S., & Budiarta, L. G. R. (2021). Incorporating E-portfolio with flipped classrooms: An in-depth analysis of students' speaking performance and learning engagement. *JALT CALL Journal*, 17(2), 93–111.
- Lam, R. (2018). Promoting self-reflection in writing: A showcase portfolio approach. In A. Burns & J. Siegel (Eds.), *International perspectives on teaching skills in ELT* (pp. 219–231). Palgrave MacMillan.
- Lam, R. (2020). Writing PA in practice: Individual, institutional, and systemic issues. *Pedagogies: an International Journal*, 15(3), 169–182.
- Lam, R., & Lee, I. (2010). Balancing the dual functions of portfolio assessment. *ELT Journal*, 64(1), 54–64.
- Lan, Y. (2022). The role of teachers' grit and motivation in self-directed professional development. *Frontiers in Psychology*, 13, 922693. <https://doi.org/10.3389/fpsyg.2022.922693>
- Lee, I. (2017). Portfolios in classroom L2 writing assessment. In I. Lee (Ed.), *Classroom writing assessment and feedback in L2 school contexts* (pp. 105–122). Springer.
- Lee, J. S., & Drajeti, N. A. (2019). Affective variables and informal digital learning of English: keys to willingness to communicate in a second language. *Australasian Journal of Educational Technology*, 35(2), 168–182. <https://doi.org/10.14742/ajet.5177>
- Lee, J. S., & Hsieh, J. C. (2019). Affective variables and willingness to communicate of EFL learners in in-class, out-of-class, and digital contexts. *System*, 82(2), 63–73. <https://doi.org/10.1016/j.system.2019.03.002>
- Lee, J. S., Sylven, L. K., & Lee, K. (2020). Cross-cultural insights into Korean and Swedish secondary school students' willingness to communicate in a second language. *Journal of Multilingual and Multicultural Development*, 52, 1–15. <https://doi.org/10.1080/01434632.2019.1708917>
- Liu, F., Vadivel, B., Mazaheri, F., Rezvani, E., & Namaziandost, E. (2021). Using games to promote EFL learners' willingness to communicate (WTC): potential effects and teachers' attitude in focus. *Frontiers in Psychology*, 12, 762447. <https://doi.org/10.3389/fpsyg.2021.762447>
- Liu, Y. (2022). Investigating the role of English as a foreign language learners' academic motivation and language mindset in their grit: A theoretical review. *Frontiers in Psychology*, 13(2), 1–15. <https://doi.org/10.3389/fpsyg.2022.872014>

- MacIntyre, P., Dörnyei, Z., Clément, R., & Noels, K. (1998). Conceptualizing willingness to communicate in a L2: A situational model of L2 confidence and affiliation. *The Modern Language Journal*, 82, 545–562. <https://doi.org/10.1111/j.1540-4781.1998.tb05543.x>
- MacIntyre, P. D., Ross, J., & Sparling, H. (2019). Flow experiences and willingness to communicate: Connecting Scottish Gaelic language and traditional music. *Journal of Language and Social Psychology*, 38(4), 536–545. <https://doi.org/10.1177/0261927X19867364>
- MacIntyre, P. D., & Vincze, L. (2017). Positive and negative emotions underlie motivation for L2 learning. *Stud. Second Lang. Learn. Teach.*, 7, 61–88. <https://doi.org/10.14746/ssl.2017.7.1.4>
- MacIntyre, P. D., & Wang, L. (2021). Willingness to communicate in the L2 about meaningful photos: Application of the pyramid model of WTC. *Language Teaching Research*, 25, 878–898. <https://doi.org/10.1177/13621688211004645>
- Marinho, P., Fernandes, P., & Pimentel, F. (2021). Digital portfolio as an assessment strategy for learning in higher education. *Distance Education*, 42(2), 253–267.
- McCoach, D. B., & Flake, J. K. (2018). The role of motivation. In S. I. Pfeiffer, E. Shaunesy-Dedrick, & M. Foley-Nicpon (Eds.), *APA handbook of giftedness and talent* (pp. 201–213). American Psychological Association. <https://doi.org/10.1037/000038-013>
- Mphahlele, R. S. (2022). Digital assessment literacy in online courses (formative/summative): Rethinking assessment strategies in the open distance and e-learning institutions. *Handbook of research on managing and designing online courses in synchronous and asynchronous environments* (pp. 404–417). IGI Global.
- Muin, C. F., Hafidah, H., & Daraini, A. M. (2021). Students' perceptions on the use of E-portfolio for learning assessment. *AL-ISHLAH: Jurnal Pendidikan*, 13(1), 497–503.
- Muslim, A. B., Hamied, F. A., & Sukyadi, D. (2020). Integrative and instrumental but low investment: The English learning motivation of Indonesian senior high school students. *Indonesian Journal of Applied Linguistics*, 9(3), 493–507. <https://doi.org/10.17509/ijal.v9i3.23199>
- Mystkowska-Wiertelak, A., & Pawlak, M. (2016). Designing a tool for measuring the interrelationships between L2 WTC, confidence, beliefs, motivation, and context," in *Classroom-oriented research*, ed. M. Pawlak (Cham: Springer), 19–37.
- Namaziandost, E., Neisi, L., & Kheryadi, & Nasri, M. (2019). Enhancing oral proficiency through cooperative learning among intermediate EFL learners: English learning motivation in focus. *Cogent Education*, 6(1), 1683933.
- Nassirdoost, P., & Mall-Amiri, B. (2015). The impact of PA on EFL learners' vocabulary achievement and motivation. *Journal for the Study of English Linguistics*, 3(1), 38–59.
- Nezkatgo, B. (2011). The effect of PA on writing of EFL students. *English Language Teaching*, 4(2), 231–241. <https://doi.org/10.5539/elt.v4n2p231>
- Nowruzi, K. M., & Nafisi, Z. (2010). Promoting EFL learners' academic motivation and reading comprehension via portfolio development of concept maps. *Journal of English Learning Studies*, 1(2), 59–82.
- Nugroho, A. (2021). Learners' willingness to communicate in a foreign language: The role of informal digital learning of English. *ELE Rev. English Language Teaching Educational Journal*, 1, 125–133. <https://doi.org/10.22515/ele-reviews.v1i2.4396>
- Nugraha, D. Y., Nugraha, D., & Widyastuti, W. (2021). The correlation between learning motivation and learning outcomes on mathematics subjects in XII science class senior high school 4 Bone. *Anatolian Journal of Education*, 6(1), 157–166. <https://doi.org/10.29333/aje.2021.6113a>
- Orzechowski, J., Smieja, M., Lewczuk, K., & Necka, E. (2020). Working memory updating of emotional stimuli predicts emotional intelligence in females. *Scientific Reports*, 10(1), 1–8. <https://doi.org/10.1038/s41598-020-77944-9>
- Öz, H., Demirezen, M., & Pourfeiz, J. (2015). Willingness to communicate of EFL learners in Turkish context. *Learning and Individual Differences*, 37, 269–275. <https://doi.org/10.1016/j.lindif.2014.12.009>
- Pavelescu, L. M. (2019). Motivation and emotion in the EFL learning experience of Romanian adolescent students: Two contrasting cases. *Studies in Second Language Learning and Teaching*, 9(1), 55–82. <https://doi.org/10.14746/ssl.2019.9.1.4>
- Price, J. K., Pierson, E., & Light, D. (2011). Using classroom assessment to promote 21st century learning in emerging market countries. *Journal of Research and Reflections in Education*, 6(2), 104–115.
- Purnama, N. A., Rahayu, N. S., & Yugafati, R. (2019). Students' motivation in learning English. *PROJECT (professional Journal of English Education)*, 2(4), 539.
- Rasool, G., & Winke, P. (2019). Undergraduate students' motivation to learn and attitudes towards English in multilingual Pakistan: A look at shifts in English as a world language. *System*, 82, 50–62.
- Reardon, V. (2017). Alternative assessment: Growth, development and future directions. In R. Al-Mahrooqi, C. Coombe, F. Al-Maamari, & V. Thakur (Eds.), *Revisiting EFL assessment: Critical perspectives* (pp. 191–208). Springer.
- Reinders, H. (2011). Towards a classroom pedagogy for learner Australian autonomy: A framework of independent language learning skills. *Journal of Teacher Education*, 35(5), 40–55.
- Rezaei, A., Namaziandost, E., & Amraei, A. (2023). Exploring the effects of dynamic assessment on improving Iranian Quran learners' recitation performance. *Critical Literary Studies*, 5(1), 159–176. <https://doi.org/10.34785/J014.2023.010>
- Roohani, A., & Taheri, F. (2015). The effect of PA on EFL learners' expository writing ability. *Iranian Journal of Language Testing*, 5(1), 46–59.
- Sallang, H., & Ling, Y. L. (2019). The importance of immediate constructive feedback on students' instrumental motivation in speaking in English. *Britain International of Linguistics Arts and Education (BloLAE) Journal*, 1(2), 1–7.
- Shechtman, N., DeBarger, A.H., Dornsife, C., Rosier, S., & Yarnall, L. (2013). Promoting grit, tenacity, and perseverance: critical factors for success in the 21st century. *US Department of Education, Department of Educational Technology*, 1 (2), 1–107.
- Shen, B., & BaiXue, B. W. (2020). Effects of peer assessment on learner autonomy: An empirical study in a Chinese college English writing class. *Studies in Educational Evaluation*, 66, 100–109.
- Shepard, L. A. (2000). The role of assessment in a learning culture. *Educational Researcher*, 29(7), 4–14.
- Shirvan, M. E., & Alamer, A. (2022). Modeling the interplay of EFL learners' basic psychological needs, grit and L2 achievement. *Journal of Multilingual and Multicultural Development*. <https://doi.org/10.1080/01434632.2022.2075002>

- Steen-Utheim, A., & Hopfenbeck, T. N. (2018). To do or not to do with feedback: A study of undergraduate students' engagement and use of feedback within a PAdesign. *Assessment and Evaluation in Higher Education*, 44(1), 80–96.
- Sudina, E., & Plonsky, L. (2021). Language-specific grit, achievement, and anxiety among L2 and L3 learners in Russia. *International Journal of Applied Linguistics*, 172, 161–198. <https://doi.org/10.1075/itl.20001.sud>
- Sudina, E., Vernon, T., Foster, H., Del Villano, H., Hernandez, S., Beck, D., & Plonsky, L. (2021). Development and initial validation of the L2 teacher grit scale. *TESOL Quarterly*, 55(1), 156–184. <https://doi.org/10.1002/tesq.581>
- Syzdykova, Z., Koblandin, K., Mikhaylova, N., & Akinina, O. (2021). Assessment of E-portfolio in higher education. *International Journal of Emerging Technologies in Learning (IJET)*, 16(2), 120–134.
- Taheri, M., & Mashhadi Heidar, D. (2019). PA and EFL learners' writing ability: Does self-regulation have a role to play? *Issues in Language Teaching (ILT)*, 8(2), 83–107.
- Tang, X., Wang, M. T., Guo, J., & Salmela-Aro, K. (2019). Building grit: The longitudinal pathways between mindset, commitment, grit, and academic outcomes. *Journal of Youth and Adolescence*, 48, 850–863.
- Teimouri, Y., Plonsky, L., & Tabandeh, F. (2020). L2 grit: Passion and perseverance for second language learning. *Language Teaching Research*, 26(5), 893–918. <https://doi.org/10.25384/sage.c.5000783.v1>
- Teimouri, Y., Sudina, E., & Plonsky, L. (2021). On domain-specific conceptualization and measurement of grit in L2 learning. *J. Psychol. Lang. Learn*, 3(2), 156–165.
- Ter, T. C., Peng, C. F., Hutagalung, F., & Hamid, Z. (2019). Integrative and Instrumental motivation among the Chinese language pre-service teachers. *International Journal of Academic Research in Business and Social Sciences*, 9(6), 1216–1227. <https://doi.org/10.6007/IJARBS/v9-i6/6083>
- Thohir, L. (2017). Motivation in a foreign language teaching and learning. *Vision: Journal for Language and Foreign Language Learning*, 6(1), 20–28. <https://doi.org/10.21580/vjv6i11580>
- Totosy de Zepetnek, J. O., Martin, J., Cortes, N., Caswell, S., & Boolani, A. (2021). Influence of grit on lifestyle factors during the COVID-19 pandemic in a sample of adults in the United States. *Journal of Personality and Individual Differences*, 175, 117–135.
- Tsagari, D. (2004). Is there life beyond language testing: An introduction to alternative language assessment? *Grile Working Papers*, 58, 126–139.
- Vadivel, B., Namaziandost, E., & Saeedian, A. (2021). Progress in English language teaching through continuous professional development—teachers' self-awareness, perception, and feedback. *Frontiers in Education*, 6, 757285. <https://doi.org/10.3389/educ>
- Virgin, J. A., & Bharati, D. A. L. (2020). Teachers' perception, plan, and implementation of PA in students' writing assessment. *English Education Journal*, 10(2), 143–153.
- Vygotsky, L. S. (1987). Thinking and speech. In R. W. Rieber & A. S. Carton (Eds.), *The collected works of L. S. Vygotsky: Vol. 1: Problems of general psychology* (pp. 39–285). Plenum.
- Wang, C. (2017). Two affective variables and language learners' perceptions of classroom Interaction. *Journal of Asia TEFL*, 14(1), 16–29. <https://doi.org/10.18823/asiatefl.2017.14.1.2.16>
- Wang, Q., & Li, S. (2019). The relationship between task motivation and L2 motivation. Researching L2 task performance and pedagogy. *Journal for Language and Foreign Language Learning*, 4, 13–67.
- Wang, Y. H., & Liao, H. C. (2008). The application of learning PAfor students in the technological and vocational education system. *Asian EFL Journal*, 10(2), 132–154.
- Wang, Y. L., Derakhshan, A., & Zhang, L. J. (2021). Researching and practicing positive psychology in second/foreign language learning and teaching: The past, current status and future directions. *Frontiers in Psychology*, 12, 731721. <https://doi.org/10.3389/fpsyg.2021.731721>
- Wang, Y. L., & Guan, H. F. (2020). Exploring demotivation factors of Chinese learners of English as a foreign language based on positive psychology. *Revista Argentina De Clinica Psicologica*, 29, 851–861. <https://doi.org/10.24205/03276716.2020.116>
- Wang, W., Li, W., Zhang, N., & Liu, K. (2020). Portfolio formation with preselection using deep learning from long-term financial data. *Expert Systems with Applications*, 143, 113042.
- Yang, N. D. (2003). Exploring a new role for teachers: Promoting learner autonomy. *System*, 26(1), 127–135.
- Yekimov, S., Nepokupna, T., Shukanova, A., Ryabev, A., & Tonkoshkur, M. (2021). Using social media to increase the communicative competence of future specialists in the field of ecological tourism, in *Proceedings of the E3S web of conferences*, Vol. 273 (Les Ulis: EDP Sciences).
- Yildirim, O. (2008). Turkish EFL learners' readiness for learner autonomy. *Journal of Language and Linguistic Studies*, 4(1), 65–80.
- Zarei, N., Saeidi, M., & Ahangari, S. (2019). Exploring EFL teachers' socio-affective and pedagogic strategies and students' willingness to communicate with a focus on Iranian culture. *Education Research International*, 2, 1–12. <https://doi.org/10.1155/2019/3464163>
- Zhang, J., Beckmann, N., & Beckmann, J. F. (2020). One situation doesn't fit all: Variability and stability of state willingness to communicate in a Chinese College English classroom. *Language Teaching Research*, 26(3), 504–529. <https://doi.org/10.1177/1362168819891330>
- Zheng, S., Heydarnejad, T., & Aberash, A. (2022). Modeling the interplay between emotion regulation, self-efficacy, and L2 grit in higher education. *Frontiers in Psychology*, 13, 1013370. <https://doi.org/10.3389/fpsyg.2022.1013370>

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