

Unravelling Grit and Motivation as Predictors of English as a Foreign Language Online Learning Readiness

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Abstract

Although the rise of online learning is becoming predominant in English as a Foreign Language (EFL) settings, little is known about the distinct functions of grit and motivation to forecast the willingness of students to study online. This paper aims to uncover how grit and motivation predict online learning readiness in undergraduate EFL students independently and jointly. In a cross-sectional survey, a convenience sample of 103 undergraduates was exposed to three validated measures, EFL grit scale, EFL motivation scale, and online learning readiness scale. Multiple linear regression showed that motivation was a significant positive predictor of readiness to online learning ($\beta = .480$, $p = .001$), but grit was not ($\beta = .133$, $p = .219$). The model explained 32% of the readiness variance ($R^2 = .320$, $F(2, 86) = 20.271$, $p < .001$). These findings highlight the need for emphasizing the crucial role of motivation to make EFL students ready to succeed in online learning settings. Teachers and policy-makers are

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advised to focus on motivational techniques, including establishing goals, supporting autonomy, and relevance frames to promote better preparedness and involvement levels among learners in online EFL courses. Future longitudinal studies ought to be conducted on grit and motivation variables to enhance the results of the online learning process.

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Introduction

Online education is now a particularly important form of education, especially when it comes to higher education (Cavanaugh et al., 2023; Gros & Garcia-Peñalvo, 2023; Imran et al., 2023). Such a transition to learning environments online requires the knowledge of the factors that make students prepared and successful (Tang et al., 2021; Strayhorn, 2014). In the English as a Foreign Language teaching, where success cannot be achieved without a consistent effort and a strong incentive, it is important to study how both grit and motivation will play their roles in the online learning preparedness (Feng & Papi, 2020). Grit, as suggested by Duckworth et al. (2007), is the mixture of endurance and interest in long-term objectives. Grit in EFL learning can be observed in the perseverance of students throughout the course of time in the face of the language barrier, complicated grammar, or the absence of visible results in the short term. Gritty students have higher chances of persisting in their quest to achieve language proficiency, even when motivation is changing or when they experience a deficit. To make a more detailed exploration of such predictors, the target of this study is the students of the English Department of the Mohammed V University in Rabat, Morocco.

Motivation can be described as the processes that result in the activation, control, and maintenance of goal-oriented behavior. Within the framework of EFL education, motivation affects how many learners would be involved in the process of using the language, how many of them would persevere in the challenges, and how much time and effort they would invest in the process of mastering the linguistic abilities. It may be intrinsic, which is motivated by interest or self-objectives, or extrinsic, as in the case of academic achievement or promotion to a higher rank (Deci & Ryan, 1985; Hoyt, 1965).

Blended and learning in higher education has been formally introduced through new reform policies in most countries during and after COVID-19 (Imran et al., 2023). Indicatively, the Moroccan Ministry of Higher Education, Innovation, and Scientific Research has recently embarked on the realization of the national plan to hasten the metamorphosis of the system of higher education, scientific research, and innovation (Pacte ESRI 2030) reform. The reforms of the undergraduate programs provide the use of online sites such as the Rosetta Stone to learn foreign languages and soft skills that have been a minor course in all disciplines. This reform is characterized by high levels of flexibility, which adds online options such as the language learning platform Rosetta

Stone and minor modules of soft skills to any subject. The pedagogical modifications enable 30 percent of the knowledge-based modules to be delivered through remote instruction using video conferencing platforms such as Google Meet, Google Classroom, and Moodle. This blended learning increases the freedom of movement of students and advances education that facilitates various learning settings. According to statistics, the number of public higher education stakeholders in 2021-2023 slightly grew, and the number of new students is 295,108, professors are 15,880, and administrative personnel are 8,520. Nevertheless, the number of students who graduated is only 140,227 in 2021/2022. The Faculty of Letters and Humanities of the Mohammed V University at Rabat is the most enrolled university in Morocco with the largest number of English enrollments, which attracts new Baccalaureate graduates (Belhiah et al., 2020). In order to receive a bachelor's degree, students should take 42 modules and have 180 credits with at least a B2 level in the first language and a B1 level in the second language. Since each of the modules will be taught two hours a week, over a 16-week semester, this equates to the official time requirement of 32 hours of one module per semester, 224 hours of seven modules each semester, 448 hours of fourteen modules per twelve semesters, and 1344 hours of seven modules per the typical three-year undergraduate degree.

Considering the popularity of online education and emphasis on numerous personal and soft skills, the study is relevant to evaluate the readiness of online learning and be original in improving grit and motivation as predictors of online learning readiness when it comes to EFL education. Although the constructs of grit and motivation have been investigated separately in the past (Duckworth et al., 2007; Ryan & Deci, 2000b), the overall effect of the two concepts on online learning preparedness, particularly in a Moroccan university, is not well-researched. This paper aims to address this gap by analyzing the interaction between grit and motivation and their influence on the readiness of online learning of English as a Foreign Language students at Mohammed V University in Rabat, Morocco.

The main purpose of the research is to determine the impact of grit and motivation on the readiness to engage in online learning among EFL students in Mohammed V University in Rabat, Morocco. To be more specific, this study aims to establish the degree to which these inherent attributes, grit, and motivational factors translate into the preparedness and ability of the students to gain entry to an online learning environment successfully.

Literature Review

The proliferation of digital education platforms, substantially accelerated by the global disruptions occasioned by the COVID-19 pandemic, has fundamentally transformed the pedagogical landscape of the twenty-first century. Within this context, online learning preparedness has emerged as a construct of pronounced theoretical and practical significance. Specifically, the extent to which learners possess the psychological, cognitive, and behavioural capacities to engage meaningfully with virtual educational

environments has become a central concern for scholars and educational practitioners alike. The present literature review interrogates the intersecting roles of two pivotal psychological constructs, motivation and grit, in shaping learner preparedness for online environments, with particular emphasis on the dimensions of self-management and determination. Drawing on a wide body of recent empirical and theoretical scholarship, this review synthesises extant findings to illuminate how these constructs collectively inform learner behaviour, engagement, and ultimate academic success in digital educational settings.

Contemporary research underscores that motivation remains a foundational predictor of learners' readiness and engagement in online contexts. Studies indicate that motivational orientations, such as goal-setting, future self-vision, and intrinsic interest, significantly shape learners' capacity to initiate and sustain participation in virtual learning environments (Derakhshan et al., 2022; Duckworth et al., 2021; Sun & Mu, 2023). In this regard, motivation is not merely an antecedent to engagement but also a regulatory mechanism that supports self-directed learning, which has been consistently identified as a core dimension of online learning readiness. Importantly, motivated learners are more likely to exhibit strategic planning, time management, and adaptive learning behaviors, all of which are essential for navigating the relative autonomy and reduced external structure of online education.

Moreover, the latest empirical works highlight the synergistic relationship between motivation and grit, mediated by constructs such as online learning self-efficacy. Research in online language learning contexts reveals that both motivation (e.g., ideal self-concepts) and grit positively influence learning satisfaction, with self-efficacy acting as a critical intermediary mechanism (Duckworth et al., 2021; Sun & Mu, 2023). This triadic relationship suggests that learners who are both motivated and gritty tend to develop stronger beliefs in their capacity to succeed in online environments, which in turn enhances their persistence, engagement, and overall learning outcomes.

Crucially, recent scholarship situates these constructs within a broader framework of self-management and determination, which are particularly salient in online education. Unlike traditional face-to-face settings, online learning requires learners to assume greater responsibility for regulating their learning processes, including time management, goal setting, and monitoring progress. In this context, motivation provides the directional force, while grit ensures the sustained effort necessary to achieve long-term educational goals. Together, they underpin learners' capacity for autonomous learning, which is widely recognized as a central component of online learning preparedness.

In sum, the most recent literature converges on the view that motivation and grit are not isolated constructs but mutually reinforcing dimensions that collectively enhance online

learning readiness. Their combined influence is most evident in fostering self-regulation, resilience, and sustained engagement, all of which are indispensable for success in contemporary online learning environments (Willingham, 1985). This literature review attempts to demonstrate that both motivation and grit constructs are important in online learning preparedness, especially in the online context, under which self-management and determination are central.

Grit

Under the present research on English as a Foreign Language (EFL) as an online learning, the most important terms are conceptualized and operationally defined to make the research structure clear. Subsequently, the conceptualization of grit, as perseverance and long-term aspirations, has been receiving more and more attention in the field of second language acquisition (SLA). Nevertheless, the use of grit in the L2 context has also received critiques, mostly with regard to the predictive validity, dimensionality, and the stability of the construct. In this regard, the longitudinal research by Khajavy et al. (2025) can be regarded as an important input since it empirically deals with these issues and provides a more sophisticated explanation of L2 grit. Grit, operationally defined as the determination and enthusiasm to work towards long-term goals, is determined with the help of the EFL Grit Scale, which is based on Duckworth et al.'s (2007) adaptation and is used to test persistence and perseverance in the language learning tasks over time.

An important criticism of research on L2 grit has been the simplification or lack of consistency in the modelling of its dimensions, that is, perseverance of effort and consistency of interest. Critics have indicated that in L2, “consistency of interest” is not always a strong psychometric concept or may not be culturally or contextually constant (Teimouri et al., 2019). The solution to the given problem, offered by Khajavy et al. (2025), is based on confirmatory factor analysis and the use of longitudinal measurement models at three time points. Their results affirm that a two-factor construct, which involves perseverance and passion, attests a consistent arrangement among EFL learners at a longitudinal level. More importantly, they determine the invariance of measurement of waves, which is a precondition of affirming that the construct is psychometrically stable as learners advance. This enhances the internal consistency validity of the grit scale adapted to L2 situations.

The longitudinal design is another significant contribution of the study, as it overcomes the cross-sectional nature of the data used in other studies, which cannot be sufficient to demonstrate the stability or maturity of grit in theory. The three-wave design enabled the authors to monitor within-person grit variations and analyze the relationship between these variations and language proficiency and other motivation constructs like L2 self-efficacy and conscientiousness (Bouih et al., 2021; Namaziandost et al., 2025).

The results implied that the two dimensions of L2 grit, perseverance and passion, significantly increased with time, and more to the point, the increases were positively

correlated with self-perceived language proficiency (SPLP) among learners. The findings overcame the previous skepticism of the predictive ability of L2 grit (Alamer, 2021; Sudina et al., 2021; Teimouri et al., 2022; Wei et al., 2019) and implied that, in language learning, grit could be a growth-oriented mental resource. Similarly, Khajavy et al. (2021) examined the relationship between L2 grit and emotional intelligence and motivation as they correlate with the willingness to communicate and academic performance. He proposed that L2 grit was capable of creating a long-term language acquisition and communicative interaction. Lee (2020) also examined the correlation between L2 grit, classroom enjoyment, and academic outcome and discovered that L2 grit positively impacted the motivation of language learners and their classroom participation, as well as academic performance. Wei et al. (2019) considered L2 grit as the one connected with self-guided strategies and long-term objectives of learners. They demonstrated that L2 grit is important for goal-setting and persistence among language learners. Moreover, as proposed by Sudina et al. (2021), the subtler nature of grit, specifically, its consistency of interest aspect, was recommended in the context of long-term L2 growth.

Another issue that Khajavy et al. (2025) considered relates to the possibility of L2 grit overbridging other constructs that have been previously established, like conscientiousness or self-efficacy, and, in that way, doubting the explanatory power of the former. Their results indicated that L2 grit adds additional predictive value in relation to L2 proficiency that has not been addressed by other explanatory variables, namely conscientiousness and self-efficacy, which add credence to the discriminant validity of grit. This is especially relevant to an online or blended learning context, where the autonomy and persistence of the learners are critical. The subtle appreciation by the authors makes L2 grit not an extraneous characteristic but an aspect that has a significant interaction with the motivational factor and other characteristics in the learner to facilitate the process of prolonged language involvement.

Motivation

Motivation is the factors that inspire, guide, and maintain behavior, which is measured using the EFL Motivation Scale created by Paradowski and Jelińska (2024). This scale differentiates between intrinsic motivation, which is caused by internal rewards and personal interest in language learning, and extrinsic motivation, which is caused by external rewards or requirements.

Readiness for online learning

Learning about the online learning concept, Martin et al. (2020) state that student readiness for online learning (SROL) is the crucial factor of a successful distance learning program. Online learning preparedness is the state of a student in terms of the readiness concerning the main competencies associated with self-discipline, technological skills, time management, and the ability to communicate, which is vital in the successful engagement in the online educational environment. Online Learning Readiness refers to the readiness of students to operate successfully within online learning systems and is

understood in a scale measuring technological competence, self-discipline, and flexibility to distance learning systems as defined by Hung et al. (2010). The constructs are measured with the help of validated measures that guarantee the reliability and validity of measurements to examine how grit and motivation affect online learning preparedness.

Self-determination theory (SDT)

Regarding the theoretical context, the Self-Determination Theory (SDT) by Deci and Ryan is pertinent to the given research since it is built on the contribution of autonomy, competence, and relatedness to the development of intrinsic motivation (Bouih et al., 2023; Deci & Ryan, 2000; Khoumich & Nadif, 2026; Nadif, 2025; Nadif & Benattabou, 2021). Online learning is mainly self-directed, and therefore, autonomy-supportive teaching practices, where learners are granted the luxury of influence in their learning processes, are very critical in online learning. Adaptive challenges and feedback can help in competence or the need for learners to feel efficacious in their language activities. Connection to instructors and peers in the online environment also makes relatedness, which improves engagement and persistence, as there is a supportive community in the online platform. The essential aspect of the theory is the need to establish the learning environment that empowers the student and gives them a sense of belonging, which is critical in the isolative environment of online education (Dietlin et al., 2019).

Although past research is mostly interested in motivation, engagement, and performance outcomes, they are more likely to investigate SDT constructs as the cause of intrinsic motivation or as the cause of academic achievement and satisfaction. They seldom extrapolate the framework to analyze the relationship of SDT with online learning preparedness, especially the EFL one. These studies tend to consider SDT variables as independent. The research that combines SDT constructs with personality characteristics of learners (e.g., grit) is lacking in order to comprehend the way in which the combination of internal and environmental resources affects online learning preparedness.

The Conceptual Model

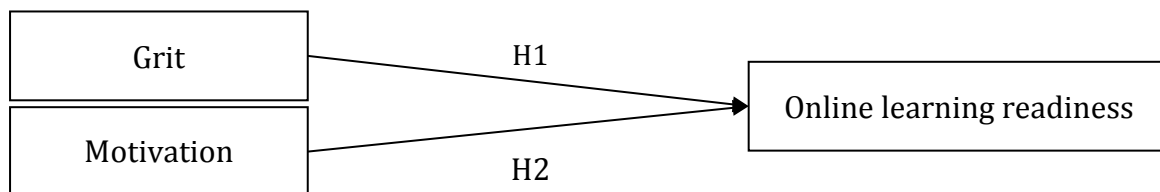
The concept of grit in EFL Learning, as a perseverance and devotion to long-term goals (Duckworth et al., 2007), is especially applicable to language learning, which demands long-term and behavior with a certain degree of effort. Teimouri et al. (2019) emphasize the role of grit in the learning of a second language, as students with a higher degree of grit tend to continue learning in difficult situations. This is in accordance with the hypothesis of the proposed research that grit has a positive effect on online learning preparedness, which will seek to generalize the effects of grit in the particular setting of EFL education. Grit, which is defined as endurance and interest in long-term ambitions and aims, is more predictive of success than the traditional academic measures such as SAT scores, significantly positive in relation to academic ambitions and goals, and is considered not to be comparable to the state of short-term self-control, associated with conscientiousness to promote individual success, and in language learning, it is shown to

be more beneficial in motivation, anxiety reduction, and better results (Changlek & Palanukulwong, 2015; Duckworth et al., 2007; Schmidt et al., 2018)

Another major determinant in educational success is motivation in learning, and this has been researched widely in different learning settings. Motivations, intrinsic and extrinsic, play a vital role in sustaining the interest of the learner and attainment of the learning outcomes (Ryan & Deci, 2000a). Paradowski and Jelińska (2024) explain how motivation affects the learning outcomes in language learning, especially when it is an online initiative, and the degree of motivation is high, since the absence of conventional classroom settings and direct teacher engagement may be addressed through the high levels of motivation.

Online learning readiness is the ability of students to utilize digital learning facilities. This construct includes technological preparedness, responsiveness to asynchronous and synchronous modes of learning, and being capable of managing and controlling learning (Hung et al., 2010). The hypothesis presented by the current research is that grit and motivation can be effectively used as predictors of increased levels of readiness related to online studies, which is justified by the research findings of the previous studies suggesting that the given qualities can positively impact the ability of the students to complete online courses successfully (Borup et al., 2013). Therefore, the study's conceptual framework will look as follows:

Figure 1
Conceptual Framework



The two hypotheses of the research are constructed using the two predictor variables, which include grit and motivation, and the dependent or outcome variable, which is online learning readiness.

H₁: Grit has a statistically significant positive influence on online learning readiness.

The study by Eskreis-Winkler et al. (2014) illustrates that grit, which is characterized as perseverance and interest in long-term oriented activities, including learning, is a predictor of success in difficult and prolonged activities. Duckworth et al. (2007) identified the role of grit in education, especially on the online platform, where self-directed learning plays a very important role, and were able to locate evidence that indicated that grittier students were more apt to continue in the educational process despite hurdles and stumbling blocks. This fact substantiates the supposition that grit

may be a significant factor in online learning preparedness by providing greater persistence and determination to students in the long-term educational expectations.

H₂: Motivation has a statistically significant positive influence on online learning readiness. The questions of motivation and readiness for online learning are thoroughly worked out in the literature. Artino (2008) states that motivation is a very essential issue that should be addressed in online learning settings because it influences learners to attend the online course content and get involved actively. This is backed up by the SDT of Ryan and Deci (2000b), which says that intrinsic motivation, which involves activities due to intrinsic satisfaction, is essential in successful online learning. Besides, studies by Kizilcec et al. (2017) reveal that motivated students tend to enroll in online courses and achieve better academic results as well. Incorporation of grit and motivation into the concept of online learning preparedness provides a complete insight into the variables that optimize the results of learning in online settings. This paper not only adds to the theoretical base of existing literature by establishing connections between these constructs through the prism of EFL learning but also offers practical implications to the teachers concerning the process of developing the interventions to boost student interest and achievement in online courses.

Methods

Research Design

In this research, the cross-sectional quantitative research design is adopted to examine the predictors of English as a Foreign language (EFL) and online learning preparedness among students of Mohammed V University in Rabat, Morocco. The cross-sectional design was selected because it enables a researcher to gather and examine the data of the participants at a specific time to find research correlations and make inferences on the connections between the independent variables (grit and motivation) and the dependent variable (online learning readiness).

Research Questions

This paper will analyze the issue of grit and motivation on the readiness of online learning among EFL students at Mohammed V University in Rabat, Morocco, and how these factors impact students' readiness and participation in virtual learning.

The research questions are established as follows:

RQ₁: Does grit have a statistically significant positive influence on online learning readiness?

RQ₂: Does Motivation have a statistically significant positive influence on online learning readiness?

Participants

The participants were 103 undergraduate students of the English Department of Mohammed V University in Rabat, Morocco, who participated in the study by responding to an online survey on the Google Forms platform. The sampling technique was suitable in the cross-sectional design because it was easy to collect data very fast over a wide

sample size of participants available on the social media platforms. Ethical permission was sought from students because there is no institutional review board at Mohammed V University. This was still done to ensure that the rights of all the participants to confidentiality and voluntary participation were not violated. Every student who gave his/her consent to participate in the questionnaire.

The sample size was 103 students of the English department, most of whom were representatives of the generation Z (n=93, 90.3 percent), and a slight majority was represented by females (n=65, 63.1 percent). The age structure consisted primarily of younger adults who were 90.3% born between 1997 and 2012, 8.7% (n = 9) belonged to the Millennials generation, and only 1.0% of the population were the representatives of Generation X (n = 1, 1.0%). In the same way, the majority of the interviewees (91.2, n = 93) were not married; this can be explained by the fact that the sample was younger.

In terms of academic progression, 33.0% (n = 34) were in their sixth semester, and then 28.2% (n = 29) were in their second semester, which showed that most of them were still in their early years of undergraduate education. Monetarily, a majority of the sample (n = 76, 74.5%) did not receive a scholarship, and only a small amount 7.8% (n = 8) received a full scholarship. The proportion of those who had not been employed and those who had been employed was equal at 62% (n = 62), and 38% (n = 38), respectively. The participants were able to provide their economic background, with 27.2% (n = 28) having a monthly household income below 3000 Moroccan Dirhams (MAD), displaying a high percentage of the participants from low economic classes. There are also other interesting income groups of 23.3% (n = 24) between 3000 MAD and 5999 MAD, 18.4% (n = 19) between 6000 MAD and 9999 MAD. With regard to university accommodation, a huge percentage (91.2%, n = 93) did not enjoy university accommodation or the company of the dormitory. To access and use technologies, however, the majority of students (90.3 percent, n = 93) had a laptop, which is necessary to be involved in the modern educational processes. There was a high frequency of using digital devices to study, with 26.5% (n = 27) stating they use digital devices often, and 52.0% (n = 53) using them always, meaning that there is a high level of technology integration in their academic life.

Table 1*Demographic and Academic Characteristics of English Department Students (N=103)*

Variable	Frequency (N)	Percentage (%)
Gender		
Female	65	63.1
Male	38	36.9
Age		
Generation Z: Born 1997–2012	93	90.3
Millennials: Born 1981–1996	9	8.7
Generation X: Born 1965–1980	1	1
Semester		
II	29	28.2
IV	21	20.4
VI	34	33
Graduated	7	6.8
Master	12	11.7
Scholarship Status		
No scholarship	76	73.8
Partial scholarship	18	17.5
Full scholarship	8	7.8
Employment Status		
No	62	60.2
Yes	38	36.9
Monthly Household Income (MAD)		
Less than 3000 MAD	28	27.2
3000-5999 MAD	24	23.3
6000-9999 MAD	19	18.4
10000-15000 MAD	8	7.8
More than 15000 MAD	12	11.7
University Housing Benefits		
No	93	90.3
Yes	9	8.7
Marital Status		
Not married	93	90.3
Married	9	8.7
Laptop Ownership		
No	10	9.7
Yes	93	90.3
Frequency of Digital Device Usage		
Never	1	1
Rarely	6	5.9
Sometimes	15	14.7
Often	27	26.5
Always	53	52

Instruments

The current study relies on validated scales to assess the EFL grit ($\alpha=.740$), EFL motivation ($\alpha=.954$), and readiness to online learning ($\alpha=.887$), which depicts that the study measures these constructs reliably. Three scales were used that were validated:

1. EFL Grit Scale: Adapted from Duckworth et al. (2007), comprising 9 items.
2. EFL Motivation Scale: Developed by Paradowski and Jelińska (2024), with 10 items.
3. Online Learning Readiness Scale: Adapted from Hung et al. (2010), including 7 items.

In order to validate and achieve reliability of the data collection, this study used three psychometrically validated scales to measure the three major constructs: EFL grit, EFL motivation, and readiness for online learning. All of the scales showed satisfactory to excellent internal consistency, based on the values of Cronbach's alpha: EFL grit ($\alpha=.740$), EFL motivation ($\alpha=.954$), and online learning readiness ($\alpha=.887$).

EFL grit scale

It is a scale that is based on the original Grit Scale created by Duckworth et al. (2007), and it is well known to evaluate the perseverance and interest of a person towards long-term goals. The modified one applied in the study contains 9 items that are particular to the context of the learning of English as a Foreign Language. These are the products that gauge two major aspects of consistency of interest and persistence of effort in the EFL learning environment. The contents were also adapted linguistically and contextually to the level of the EFL learners in the university.

EFL motivation scale

This scale is a 10-item scale designed to assess motivation in the context of EFL learning, developed by Paradowski and Jelińska (2024). The scale is able to encompass intrinsic and extrinsic motivational aspects that can inspire learners to be more engaged and motivated to learn English as a foreign language. Being of relatively recent origin, the scale represents the modern views on motivation in language learning, and the high level of reliability ($\alpha=.954$) of the scale can be viewed as its strength in application to any academic studies with EFL populations.

Online learning readiness scale

This scale, with 7-item was a modification of Hung et al. (2010), which initially intended to assess the readiness of students in the online learning condition. The scale measures such essential elements of readiness for online learning, like self-directed learning, learner control, and learning motivation in an online environment. In the current research, the scale was changed according to the academic and cultural background of EFL students at Mohammed V University. Its reliability score ($\alpha=.887$) justifies its appropriateness to determine the ability and confidence of learners in using online learning.

Procedure

The fact that digital distribution channels were being used was also beneficial in supporting the cross-sectional research design that aims at capturing data at one point in time. The use of social media and messaging services that are familiar to the student population enabled the study to collect responses easily, irrespective of the faculties or academic levels, in a very limited amount of time. It also reduced logistical restrictions that are closely linked to face-to-face data collection due to the growing use of digital communication in educational institutions. The participants were told about the purpose of the study, guaranteed their anonymity, and given the information about consent before they started with the survey. The fact that participation is voluntary, as well as that it is convenient to fill out the form on a mobile phone or a computer, probably led to a better response rate and quality of the data. Moreover, responses scanned in time also enabled the researcher to track and filter against entries as well as safeguard the data quality of the dataset. Thus, Google Forms usage and sharing on the FB and WhatsApp group allowed successful, timely, and ethical data collection, which fits into the methodology and goals of the study.

Data Analysis

The model was evaluated based on the fitness through the use of SPSS. To further explain how the model fitness was evaluated with the help of SPSS, you can make your statement longer and present the exact output of statistical facts that demonstrate the model's relevance and fit. The following section is a more detailed and scholarly written form of that section.

Analysis of the data was done using the SPSS software, Version 28. The study used a combination of descriptive statistics, Pearson correlation coefficients, and multiple linear regression analysis to examine the relationship between the variables and to test the predictive value of the study variables (grit and motivation) on online learning readiness as per the theoretical framework of the study. In order to determine the fitness and adequacy of the regression model, some diagnostic indicators were to be considered. The proportion of variance of online learning readiness explained by the independent variables (grit and motivation) was evaluated using R-squared (R^2) and adjusted R-squared values. An increased value of R^2 is a better indicator of the explanatory power of the model. The F-test of the overall model significance was examined to ascertain whether the overall model was significant in predicting the dependent variable. The observation of a significant F-statistic ($p < .05$) indicates that at least one of the predictors has a significant influence on the outcome. The predictor variables that had a significant contribution to the model and their significance were determined by standardized beta coefficients (β) and p-values. To ensure that the predictors were not multicollinear, the variables were investigated using Collinearity diagnostics, such as Variance Inflation Factor (VIF) and Tolerance values. VIF values were lower than 10 and tolerance higher than 0.1; therefore, no problematic multicollinearity. Residual analysis was used to confirm assumptions of linearity, homoscedasticity, and normality of the residuals. This

involved the use of normal probability plots (P-P plots) and plots of standardized residuals.

Reliability and Validity

When it comes to evaluating the characteristics of students that are relevant to the learning of the language, and the online education, three highly validated scales, EFL Grit ($\alpha = .740$), EFL Motivation ($\alpha = .954$), and Readiness for Online Learning ($\alpha = .887$), prove to be highly reliable and specific in the measurement of perseverance, motivation, and preparedness, respectively.

Table 2

Reliability of the Likert Scales

No	Scales	Number of items	Cronbach alpha
1	EFL Grit	09	.740
2	EFL Motivation	10	.954
3	Readiness for Online Learning	07	.887

The EFL Grit Scale, based on Teimouri et al. (2019) and having 9 items, demonstrated a Cronbach's alpha of .740 (Table 2) that represents great internal consistency and good ability to measure perseverance and passion towards long-term language learning goals as well. The importance of persistence in mastering the foreign language and commitment to it can be seen in such key items as "I am a diligent foreign language learner" and "I put much time and effort into overcoming my foreign language weaknesses". Meanwhile, the EFL Motivation Scale, the supervision of Paradowski and Jelińska (2024), consisted of 10 items, where the Cronbach's alpha was 0.954, which is an indicator of good reliability in determining intrinsic and extrinsic motivation to learn. This scale explains the motivation of the engagement and persistence in the educational activities with such statements as I am curious about many things, "I enjoy solving problems." Also, the Readiness for Online Learning Scale, which is a modification of Hung et al. (2010), has 7 items, and the Cronbach alpha value was given as .887. This score is very high and helps to realize the ability of the scale to assess the student's readiness for the online learning conditions, as such questions like "I have good Internet access to attend the online classes," and "I cannot be easily discouraged by technological barriers" are crucial to the successful online learning process. These scales, when combined, offer powerful instruments to study a number of facets of educational psychology and student behavior in a learning environment.

Results

The current research paper will use both descriptive and inferential statistics to interpret the results of self-reported questionnaires and, thus, identify the psychological and contextual factors that contribute to the willingness of students to use digital platforms in learning the English language in an EFL environment. This study is based on two similar but separate constructs, grit and motivation as determinants of adaptability and

engagement of learners in the online education at Mohammed V University, Rabat, Morocco.

Instead of considering readiness to online learning as a technical or cognitive competence, the present study critically looks at the role played by affective and dispositional factors. Conceptualized as a continuous effort and motivation in the long-term academic outcomes, grit is compared with intrinsic and extrinsic aspects of motivation to determine whether they have a synergistic or divergent effect on digital learning behaviors of students. In this way, the study goes beyond what many studies do by moving past simplistic correlations to unravel the intricate relationship between emotional resilience, goal orientation, and motivational regulation in language acquisition through digital mediation.

It is a complex question that adds to the current discussion in the academic community regarding learner control, online pedagogy, and emotional involvement in EFL learning. It also provides practical information to the educators and policy makers wishing to create more responsive and psychologically sensitive online learning spaces. Finally, the results put a challenge to educators to reconsider the structure of digital language teaching in a manner that fosters perseverance and enhances motivational commitment to the personal goals and sociocultural context of learners.

EFL Grit

When 103 students of the English department were surveyed on the parameters of gauging their grit in learning a foreign language (EFL Grit), the answers were different in a number of parameters of endurance and engagement. Grit has nine Five-Point Likert scales that can be further divided into two subscales: perseverance of effort, which includes how people continue to make effort to reach long-term goals despite facing obstacles, and consistency of interest, which includes the capability to remain interested in the goal in the long term. Table 3 depicts that the number of students who were keen on learning is high, as 41.7% and 19.4% agreed and strongly agreed that they are serious in their studies, respectively ($n = 43$; $n = 20$, respectively). On the other hand, the interest variation was noticeable, with 29.1% of those who responded that they change their interest in learning a foreign language every year, and another 29.1% responded that it does not ($n = 30$ each), and this indicated that the respondents are not consistently motivated. It is important to note that only 36.9 percent who strongly disagreed and 32.0 percent who disagreed indicated that they still had the same level of interest in learning the foreign languages ($n = 38$; $n = 33$, respectively). Nevertheless, the likelihood of achieving language learning objectives is high, as 35.0% of the participants confirmed agreeableness and 23.3% strongly agreed that nothing could stop them from achieving their objectives once they choose to study a foreign language ($n = 36$; $n = 24$, respectively). The statistics serve as an indication of the difficulties of maintaining the long-term interest and also the determination that many students still have to overcome the hurdles on the way to the language learning process.

Table 3
EFL Grit (N=103)

	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree	
	F	%	F	%	F	%	F	%	F	%
1. I am a diligent foreign language learner.	8	7.8%	8	7.8%	24	23.3%	43	41.7%	20	19.4%
2. My interests in learning a foreign language change from year to year.	9	8.7%	30	29.1%	22	21.4%	30	29.1%	12	11.7%
3. When it comes to foreign languages, I am a hard-working learner.	5	4.9%	21	20.4%	33	32.0%	27	26.2%	17	16.5%
4. I think I have lost my interest in learning foreign language(s).	38	36.9%	33	32.0%	18	17.5%	11	10.7%	3	2.9%
5. Now that I have decided to learn a foreign language, nothing can prevent me from reaching this goal.	6	5.8%	16	15.5%	21	20.4%	36	35.0%	24	23.3%
6. I will not allow anything to stop me from my progress in learning a foreign language.	7	6.8%	16	15.5%	14	13.6%	44	42.7%	22	21.4%
7. I am not as interested in learning a foreign language as I used to be.	19	18.4%	42	40.8%	20	19.4%	17	16.5%	5	4.9%
8. I was obsessed with learning a foreign language in the past, but recently I have lost interest.	23	22.3%	36	35.0%	19	18.4%	19	18.4%	6	5.8%
9. I put much time and effort into overcoming my foreign language weaknesses.	7	6.8%	22	21.4%	25	24.3%	38	36.9%	11	10.7%

EFL Motivation

Survey findings in evaluating EFL Motivation of EFL students showed a high tendency for continuous learning and problem-solving.

Table 4

EFL Motivation (N=103)

	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree	
	F	%	F	%	F	%	F	%	F	%
1. I am curious about many things.	7	6.8%	4	3.9%	15	14.6%	44	42.7%	33	32.0%
2. I enjoy solving problems.	9	8.7%	10	9.7%	21	20.4%	36	35.0%	27	26.2%
3. I get pleasure from learning.	8	7.8%	10	9.7%	19	18.4%	38	36.9%	28	27.2%
4. I hope to constantly improve my learning outcomes.	6	5.8%	7	6.8%	11	10.7%	48	46.6%	31	30.1%
5. I will never be too old to learn new things.	7	6.8%	7	6.8%	14	13.6%	32	31.1%	43	41.7%
6. I enjoy learning about many new things.	8	7.8%	6	5.8%	14	13.6%	33	32.0%	42	40.8%
7. While learning, I enjoy challenges.	7	6.8%	15	14.6%	29	28.2%	27	26.2%	25	24.3%
8. I believe that I can learn a lesson no matter how complicated.	8	7.8%	10	9.7%	32	31.1%	30	29.1%	23	22.3%
9. I like learning, regardless of my learning results.	7	6.8%	21	20.4%	15	14.6%	41	39.8%	19	18.4%
10. I will not give up learning when I encounter difficulties.	10	9.7%	9	8.7%	17	16.5%	40	38.8%	27	26.2%

Table 4 demonstrates that most of the students were very curious, as 42.7 and 32.0 percent of these students stated that they are curious about many things and strongly curious, respectively (n = 44; n = 33, respectively). Equally, 35.0% and 26.2% indicated the enjoyment in solving problems, agreeing and strongly agreeing respectively (n = 36; n = 27). Pleasure of learning was also important as 36.9% and 27.2% concurred and strongly concurred respectively (n = 38; n = 28). Moreover, a strong belief in personal development was also reflected, as 46.6% of the participants said they wished to continuously enhance their learning results and 30.1% strongly so (n = 48; n = 31). The attitude towards lifelong learning was also quite high, as 31.1% of the participants indicated agreement, and 41.7% strongly agreed that one can never be too old to learn

something new (n = 32; n = 43). There was also an acceptance of challenges by a large proportion, as 26.2 and 24.3% agreed and strongly agreed that they like challenges in learning (n = 27; n = 25). These results show that students have a powerful motivational structure, with a proactive learning attitude and a willingness to overcome challenges, which suggests that it is a highly motivated population and one with high adaptive learning.

Readiness for Online Learning

The assessment of Readiness to Online Learning of 103 students revealed conflicting answers in regard to the ability and setting to embrace online learning. The good internet, which is a basic requirement in taking remote classes, was met with a mixed response as 32.0% said that they have good internet and 11.7% strongly agreed with that, but 12.6% strongly disagreed and 19.4% disagreed (n = 33; n = 12; n = 13; n = 20, respectively). Equally, 38.8% asserted that they have frequent access to a computer needed to take courses online, with 15.5% strongly affirming the same; however, 12.6% strongly disagreed, and 21.4% disagreed (n = 40; n = 16; n = 13; n = 22).

In terms of whether software was suitable for online courses, 39.8 percent and 15.5 percent had agreed and strongly agreed that it was adequate, which presents a favorable arrangement to 55.3 percent of the students (n = 41; n = 16). When asked about the challenges they face, especially those that are related to technology, 23.3% said they are not easily discouraged, and 16.5% strongly agreed, indicating a resilience among 39.8% of the students, even though 10.7% strongly disagree and 21.4% disagree (n = 24; n = 17; n = 11; n = 22). The degrees of comfort with teachers online were found to be adequate, with 27.2% and 25.2% agreeing and strongly agreeing, respectively, and 25.2% disagreeing and 10.7% strongly disagreeing, respectively, which is a significant variation in comfort level (n = 28; n = 26; n = 26; n = 11). On the issue of expressing opinion through the use of video conferencing systems such as Zoom and Google Meet, 28.2% responded affirmatively and 21.4% strongly affirmatively that they find it easy, but 15.5% strongly disagreed and 17.5% disagreed (n = 29; n = 22; n = 16; n = 18). Finally, 39.8% consented, and 18.4% strongly consented, although 7.8% strongly disagreed, and 14.6% disagreed (n = 41; n = 19; n = 8; n = 15), the willingness to share ideas and discuss them in online group work was positively rated. These results shed light on the issues and the assets of the student population in the process of becoming accustomed to the online learning environment. This implies that the provision of better technological access and facilitation to improve online education activity is required.

Table 5*Readiness for Online Learning (N=103)*

	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree	
	F	%	F	%	F	%	F	%	F	%
1. I have good Internet access to participate in remote classes.	1	12.6	2	19.4	2	24.3	3	32.0	1	11.7
	3	%	0	%	5	%	3	%	2	%
2. I have regular access to a computer to participate in my online course.	1	12.6	2	21.4	1	11.7	4	38.8	1	15.5
	3	%	2	%	2	%	0	%	6	%
3. The software I use is suitable for fully participating in my online course.	1	11.7	1	18.4	1	14.6	4	39.8	1	15.5
	2	%	9	%	5	%	1	%	6	%
4. I am not easily discouraged when confronted with technology-related obstacles (e.g., Internet connection problems, difficulty with using the software, downloading/uploading, etc.).	1	10.7	2	21.4	2	28.2	2	23.3	1	16.5
	1	%	2	%	9	%	4	%	7	%
5. I am comfortable communicating with the teacher online.	1	10.7	2	25.2	1	11.7	2	27.2	2	25.2
	1	%	6	%	2	%	8	%	6	%
6. I find it easy to express my opinion to others through video conferencing (e.g., Zoom, Google Meet, Google Classroom, MS Teams, Webex, VooV, Skype, etc.).	1	15.5	1	17.5	1	17.5	2	28.2	2	21.4
	6	%	8	%	8	%	9	%	2	%
7. I am willing to share my ideas and discuss them in an online group work.	8	7.8%	1	14.6	2	19.4	4	39.8	1	18.4
			5	%	0	%	1	%	9	%

Multiple Linear Regression

EFL Grit and EFL Motivation were tested in terms of their role on the outcome variable in a regression analysis of the predictors of Readiness to Online Learning conducted on a total of 89 participants following data cleaning, outlier removal, and normality checking procedures. The findings showed that Readiness for Online Learning was moderately positively related to EFL Grit ($r=.405$, $p < .001$) and EFL Motivation ($r=.555$, $p < .001$), and the latter had a stronger correlation. Descriptive statistics showed that Readiness for Online Learning, EFL Grit, and EFL Motivation have an average score of 3.47, 3.56, and 3.92, respectively.

Table 6

Regression Analysis Predicting Readiness for Online Learning from EFL Grit and EFL Motivation

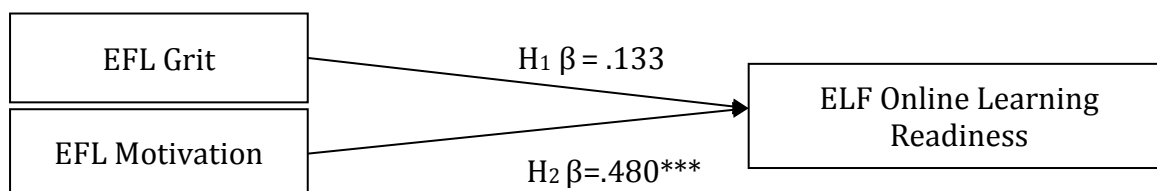
Variable	B	Std. Error	β	T	p
Constant	.72	0.46		1.57	.12
EFL Grit	.17	0.14	.13	1.23	.219
EFL Motivation	.54	0.12	.48	4.45	<.001

Note: $R^2 = .32$. Adjusted $R^2 = .30$. $F(2, 86) = 20.27$, $p < .001$. Durbin-Watson = 1.96.

The regression model explained 32.0 percent of the variance in Readiness to Online Learning ($R^2 = .320$, $F(2, 86) = 20.271$, $p = .001$), and its adjusted $R^2 = .305$. This model fit appropriately shows that the relationship between the predictors and the outcome is significant and substantial. The standardized coefficients showed that EFL Motivation was more significant ($\beta = .48$, $p = .001$) than EFL Grit ($\beta = .13$, $p = .21$), which did not show any statistically significant values. Motivation is thus the best predictor of online learning. In addition, analysis revealed that the standard deviation of the residual was .65 and Durbin Watson was 1.96, which indicates that the hypothesis of independent errors had been fairly satisfied. The means of Readiness to Online Learning was predicted to lie between 2.38 and 4.31, showing readiness at different levels of the participants. The received results can be stated as indicating that EFL Motivation is a critical predictor of the willingness of individuals to engage in online learning that is in a much larger scope than EFL Grit in the circumstances of this study.

Figure 2

Hypothetical Model to be Tested



Note. *** $p < .001$

The research was grounded on a predictive model whereby grit and motivation are regarded as internal learner traits that directly affect the capacity to succeed in web-based learning setups. In this conceptualization, online learning preparedness serves to assess student preparedness, confidence, and ability to participate in online learning. The model, therefore, assumes a definite one-way causal direction, but not a two-way or reciprocal and bidirectional cause. To summarize, motivation in relation to grit has a strong influence on the determination of the readiness of EFL students to online learning, as revealed in the results of this research. Although grit indicates long-term endurance, it does not directly indicate readiness for the specialities of online education. Rather, motivation, which is a result of intrinsic and extrinsic factors, becomes an important factor that defines whether or not students are able to participate and succeed in online

learning facilities. These lessons are imperative to teachers and policy-makers who want to improve digital education approaches.

Discussion

The research presented below elaborates on the role of grit and motivation in determining the preparedness of students to online learning, and the results of the research are interpreted in terms of the existing theoretical frameworks and their significance to educational practice.

The researchers came up with a number of findings. The findings have shown that grit, as determined by the EFL Grit Scale, failed to affect online learning preparedness statistically significantly with a positive effect ($\beta=.13$, $p =.219$). This implies that perseverance and interest in long-term objectives are good qualities, but they might not necessarily be directly related to online learning preparedness among the EFL students in this regard. Conversely, motivation was positively and significantly associated with the online learning readiness ($\beta =.48$, $p <.001$). This explains why intrinsic and extrinsic motivation are essential in equipping students to effectively participate in online learning platforms. Grit and motivation have a synergetic effect on preparedness for online learning. The regression model explained 32.0% of the variance of online learning readiness ($R^2 =.320$, $F(2, 86) = 20.271$, $p <.001$) with motivation being the more significant predictor.

In a large-scale Iranian case, Derakhshan and Fathi (2023) found that grit (measured as L2 grit) had no direct effect on online engagement but indirectly mediated through the online learning self-efficacy hypotheses as to whether grit alone suffices for online learning self-efficacy or not. Although the direct influence of grit is conditional, motivation and self-efficacy are predictive of participation in the Iranian online environments. Derakhshan and Fathi (2023) highlight self-efficacy in online learning as a key factor, not just in the mediation of grit and engagement, but in promoting online learning preparedness in students. Khajavy and Aghae (2022) discovered the relationship between L2 grit and online learning engagement mediated by online self-efficacy. Equally, a study done on grit, classroom enjoyment, and willingness to communicate (WTC) among Iranian students showed that grit was correlated with persistence in face-to-face classrooms, particularly perseverance of effort, but not with classroom enjoyment, where classroom emotion was negative. Such results are in congruence with the finding that grit might not have a direct positive effect on online readiness without situational moderators such as online learning self-efficacy.

The regulatory role of grit has been highlighted in recent studies as the determinant of the emotional reactions of learners and the continuation of their motivation (Heydarnejad et al., 2022; Khajavy & Aghae, 2022; Namaziandost et al., 2023; Wongdaeng, 2022). In the framework of the English as a foreign language (EFL), the

results of the study by Fathi et al. (2021) also contribute to the significance of L2 grit in encouraging a learner and increasing their desire to communicate in the target language. Namaziandost et al. (2023) have shown that self-efficacy and motivation are closely related, whereas grit is the primary mediator of motivation and minimizes demotivation. They also discovered that Grit facilitates motivation, whereas online self-efficacy is more directly linked to engagement and readiness. In another study, Abdolrezapour and Ghanbari (2021) found out that, although grit has a positive relationship with self-efficacy and reflective abilities (core of self-assessment), its effect on the online engagement is mediated by online self-efficacy instead of the direct effect, which implies the role of confidence that learners have in handling the online learning environment is the pathway through which grit influences their sustained engagement and performance in online learning environment.

The huge positive impact of motivation on readiness for online learning is congruent with the body of extensive research that has addressed the importance of motivation in education and learning performance (Ryan & Deci, 2000a). Both intrinsic and extrinsic motivation, which are motivated by personal interest and enjoyment, respectively, can be used to explain the willingness of students to find their way and pass through the online learning setting and succeed. This conclusion is in line SDT, which asserts that the achievement of a psychological need of autonomy, competence, and relatedness increases motivation, hence, learning results (Deci & Ryan, 2000; Nadif, 2025; Nadif & Fayzullaevna, 2024).

The interaction effect between grit and motivation on online learning preparedness, with motivation as the stronger predictor, implies that the element of perseverance is significant; however, the short-term motivation driven by motivation is the most important factor that makes students ready to take on the challenges of online learning. This helps to keep up the idea that online learning settings can have more severe requirements on the motivational levels of the students because of the self-directed learning process and the necessity to consistently interact with electronic media (Artino, 2008; Kizilcec et al., 2017).

Grit is not enough online due to its lack of a strong direct impact in online engagement as per the studies of (Abdolrezapour & Ghanbari, 2021; Derakhshan & Fathi, 2023; Khajavy & Aghaee, 2022), rather it is mediated by online learning self-efficacy. The reason can be seen in the fact that there is a difference between trait-level perseverance and context-specific competence beliefs. Grit speaks of long-term persistence of effort and constancy of interest in language learning (L2 grit). Nevertheless, internet interaction requires more than perseverance; it requires technological expertise, digital navigation ability, and Confidence in problem fixing and handling internet issues.

In the absence of perceived ability in these areas, endurance has no direction or effectiveness. Therefore, grit gives energy, whereas self-efficacy gives agency. This is a great fit with the Social Cognitive Theory developed by Bandura, who suggests that efficacy beliefs are what make the difference between people who commit themselves to action in the long run and those who do not. Moreover, in neutral or negative emotional conditions, the effect of grit diminishes, as demonstrated in face-to-face research conducted to study classroom enjoyment and WTC. This implies that grit does not create engagement by itself, but it controls the responses to challenge. Grit does not exhibit behavior when there are no contextual supports (positive emotions or digital competence).

As to the howness of the mechanism operation of grit, self-efficacy, online readiness, and engagement, the grit promotes reflective abilities (Abdolrezapour & Ghanbari, 2021), demotivation (Namaziandost et al., 2023), and perseverance in demanding tasks. These attributes improve the learning experiences of the learners as time goes by. There are mastery experiences that are the most effective source of self-efficacy. The more learners continue to do it, to transcend the digital difficulties, the more they become confident in handling the online tools. This increased online self-efficacy subsequently reflects on active engagement, online perseverance, and a high level of online preparedness. In this way, grit acts indirectly by enhancing the mechanism of engagement, which is psychological in nature. This interpretation is consistent with accumulating evidence from EFL contexts. Studies conducted in this regard demonstrate that L2 grit exerts its influence on online engagement primarily through the mediating role of online self-efficacy (Abdolrezapour & Ghanbari, 2021; Derakhshan & Fathi, 2023; Khajavy & Aghae, 2022). Such findings challenge any simplistic assumption of a direct grit-readiness linkage and instead point to a mediated pathway in which learners' beliefs about their capability to manage digital learning environments serve as the critical mechanism. In this sense, grit provides the persistence to remain engaged over time, but without sufficient self-efficacy, this persistence lacks functional direction. A theoretically grounded explanation can be drawn from Social Cognitive Theory, which posits that efficacy beliefs are central determinants of whether individuals translate intentions into sustained action. Within online learning environments, characterized by technological demands, autonomy, and reduced external regulation, students must not only persist but also believe in their capacity to navigate digital platforms, troubleshoot problems, and regulate their own learning. Consequently, the absence of a significant direct effect of grit may reflect a misalignment between a general dispositional trait and the specific competencies required in online contexts.

By contrast, the strong effect of motivation aligns with SDT, which emphasizes the role of autonomy, competence, and relatedness in fostering effective learning behaviors. Online environments intensify the need for self-regulation and sustained engagement, thereby amplifying the role of both intrinsic and extrinsic motivational processes. Motivation,

unlike grit, is highly responsive to contextual affordances and can be immediately mobilized to meet the demands of online learning tasks, explaining its dominant role in predicting readiness. Importantly, the reported interaction between grit and motivation suggests a complementary rather than competing relationship. While motivation appears to function as the primary catalyst for engagement, grit may serve a regulatory function, stabilizing effort over time and mitigating fluctuations in motivational intensity. However, this regulatory role becomes effective only under enabling conditions, particularly adequate levels of self-efficacy and positive emotional experiences. Evidence indicating that grit is unrelated to classroom enjoyment or weakened under negative emotional conditions further supports the argument that grit does not independently generate engagement but rather moderates learners' responses to challenges.

Taken together, these findings support a more nuanced model in which grit operates indirectly by fostering persistence and reflective learning processes, which, through repeated mastery experiences, enhance self-efficacy. This increased self-efficacy, in turn, translates into greater online engagement and preparedness. Therefore, the key explanatory mechanism is not grit per se, but the extent to which it contributes to the development of context-specific confidence and competence. This perspective shifts the focus from viewing grit as a standalone predictor to understanding it as part of a broader, dynamically interacting system of motivational and cognitive factors that underpin successful online learning.

The paper has investigated the relationship between grit and motivation in the preparedness of EFL students to online learning. The results have found that whereas grit did not significantly directly affect the outcome, motivation was found to be a robust and coherent predictor of online learning readiness. The outcomes obtained substantiate the pivotal position of motivational constructs in the formation of the student readiness to work with digital learning environments. The integrated model implies that, as much as grit is an important resource, it is the imminent and context-specific power of motivation, which facilitates online learning preparedness more successfully, particularly in EFL conditions.

Elements that will appeal to both intrinsic and extrinsic motivation should be included in curriculum design by the curriculum designers. As an example, the elements of gamification, real-life practice of language skills, and the chance to choose and act independently can be used to ensure motivation at a high level (Keller, 1987). The educators ought to be trained to be able to identify and foster student motivation. Online professional development programs can prepare educators to develop autonomy-supportive classroom environment techniques even in an online classroom by offering students meaningful choices and a growth mindset in order to foster commitment to learning. Since answers on technological readiness were quite diverse, it is important to make sure that students are provided with reliable internet connections and proper


technological equipment. With regards to institutional emails and online learning platforms such as Moodle and Google Classroom, institutions should consider giving technical support and resources to students who might not have the required infrastructure to do online learning.


Although it has been helpful, this study is not unlimited. It has also been restricted to EFL learners in one cultural and educational environment, which can limit the extrapolation of the results. In addition, the cross-sectional design fails to reflect the evolution of grit and motivation with time or with varying phases of online learning. The longitudinal designs may be used in future studies to detect the modifications in motivational profiles and how they will impact the success of online learning. Moreover, qualitative studies might reveal more information about the experience and perception of motivation and grit among the students in the digital learning setting. Increasing the sample to encompass other cultural and technological settings would also increase our insight into how the psychological characteristics interrelate with the readiness to study online.


Conclusion


When considering the results of the study, we can believe that the influence of motivation has a much greater determining effect on the preparedness of EFL students to online learning than the effect of grit. Although we first theorized that both grit and motivation would be strong predictors, the data clearly indicated that motivation, both intrinsic and extrinsic, was the stronger and more consistent predictor. This observation drives us to redefine the value that we tend to attach to grit in the context of education, especially in online learning, where flexibility, independence, and long-term interaction are the order of the day. In our view, the relevance of this study is one of its important contributions. Attending to Moroccan EFL learners who have undertaken online education despite the difficulty of online learning preparedness, we bring in timely information on the issue of perennial challenges and opportunities in digital learning. The thing that captures our attention the most is that educational practices that are not aimed at the mere development of grit are necessary. Rather, we feel the focus should be changed to creating learning environments, which are proactive in motivating students, by being relevant, with feedback and autonomy, and through available digital infrastructure. The study confirms our position that the motivation of students is not a secondary issue but one of the key foundations to successful online learning. As educators and scholars, we witness an acute necessity of pedagogical, policy-level interventions that would render motivation visible, quantifiable, planned, and developed in the online classroom.

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Ethics Declarations

World Medical Association (WMA) Declaration of Helsinki-Ethical Principles for Medical Research Involving Human Participants

This research was accomplished in fulfillment with the World Medical Association the university (Approval No. 19/KER-LPPM/EC/2023). Every participant was informed about the process.

Competing Interests

We declare that we have no competing interests.

Data Availability

The data are available upon reasonable request.

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