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For Grades or for Learning? Influence of Academic Orientations on Vietnamese Undergraduates' Learning Strategy Use and Mental Well-Being

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Abstract: The use of grades as an extrinsic motivator in formal schooling has been demonstrated in previous research to have negative implications for students' learning and mental health. This subject matter has been particularly absent from the research literature in Vietnam, where the obsession with grades is self-evident. The present study aims to explore Vietnamese university students' orientations toward learning and grades, learning strategy use, mental well-being, and how these variables correlate. In addition, the study examines the potential interplay between learning orientation and grade orientation to influence the latter two variables. A quantitative research design was employed to achieve these goals. Survey responses were collected from 38 second- and third-year students majoring in English Language at a large, public university during a summer semester. Specifically for learning strategy use, participants were directed to pull from their experiences in a Public Speaking course that they had completed in the previous semester. Results revealed that a learning orientation was moderately related to both adaptive learning strategy use and mental wellness, whereas a grade orientation was only negatively related to learning strategy use and unrelated to mental well-being. Moreover, a strong learning orientation alone resulted in the most positive outcomes for both learning and mental health, and higher levels of grade orientation weakened those outcomes. Limitations of the study, directions for future research in this area, and implications for students and educators are then discussed.

Keywords: *Grade orientation, learning orientation, learning strategy use, mental well-being.*

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Introduction

Since its inception in the late 18th century (Stiles, 1901), grading has proliferated and become one of the most fundamental aspects of any educational system. Grades are now accepted as a natural part of schooling and assessment: students ask about each other's grades as soon as they get their papers back, class hierarchies are re-established after every major exam, teachers spend hours of preparation time marking essays and filling out grade books, and family dynamics change for better or for worse when the report cards arrive. In Vietnam, grades have deeply integrated with culture and the school experience. Even from primary school, it is explicitly expected of children to bring home to their parents the proverbial *hoa điểm 10* (10-point flowers) as evidence of their academic success. Besides such consequences, grades are also a pivotal determinant of a person's future. School and university options one can attend, eligibility for possibly a life-changing scholarship, the first impression with an employer, all are decided by a few numbers, or letters, on one's academic transcript.

The discussion over grading has persisted throughout its short history, with arguments for both its merits and limitations being raised by educators, administrators, stakeholders, and academics. Proponents often center their reasoning around the practical features of grades (Schwab et al., 2018). Grades reduce the complex nature of student learning and behavior to simpler data, thus enabling their role as a means of record-keeping and communication. Critics of grading, on the other hand, argue that its many adverse effects outweigh its utility. A growing body of literature posits that grades, a central extrinsic motivator in schools, undermine student learning and mental health (Kohn, 1993; Lynch & Hennessy, 2017; Tannock, 2017). When students are compelled to compete for a grade, intellectual interest suffers as a result. Beyond the

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exam hall, a lot of students attach their self-worth to grades as a consequence of being conditioned by the school system or culture, letting their mental health take on the volatility of grades.

The role that grades play in Vietnamese education remains largely unquestioned and unexplored. Within secondary schools, while core subjects like Mathematics still employ a numerical 10-point grading scale, there has been a recent shift in assessment practice for certain subjects, for example, a pass/fail arrangement for Music, Art, Local Education, and Career Education (Ministry of Education and Training, 2021b). Even so, core subject grades are still overemphasized. In the tertiary education context, assessment structures likewise employ either numerical or letter grades (Ministry of Education and Training, 2021a). Several studies have identified school-related elements, which include test scores, as stressors for university students (H. T. Nguyễn, 2009; T. N. N. Nguyễn et al., 2020), though there is a lack of literature on grading specifically. Research in this area may prove beneficial not only to education policymakers but also to educators who wish to better understand their students and provide appropriate interventions.

A key underlying construct of this discourse is students' orientations toward learning and grades. Not all students educated in an environment with grading will turn out the same as each person has different perceptions of and goals for their learning. For all the aforementioned reasons, the present study aims to investigate two relationships among undergraduate students: academic orientations and learning strategy use, and academic orientations and mental well-being.

Literature Review

Academic Orientations

Past research has indicated that students hold grades and learning at varying levels of significance. Students' attitudes toward these two elements were conceptualized by Eison (1981) as *learning orientation* (LO) or *grade orientation* (GO), measured with the newly developed LOGO scale. Learning-oriented students are motivated by the learning process itself, viewing it as a means for intellectual fulfillment; on the other hand, grade-oriented students value grades and other extrinsic rewards as the ultimate goals of education. In terms of personality, high LO students were identified as more emotionally stable, collaborative, and self-sufficient, while high GO students were characterized by higher competitiveness (Eison, 1982; Tippin et al., 2012).

Initially, learning orientation and grade orientation were believed to be two dichotomies of the same dimension. This relationship was later reconsidered by Eison et al. (1983). They advanced that learning orientation and grade orientation are two independents but interacting constructs, that students could value both learning and grades, or neither, at once. Resulting from this dualistic perspective were an improved measurement — the LOGO II scale — and categorization of students into four groups: High LO/High GO (H-H), Low LO/Low GO (L-L), High LO/Low GO (H-L), and Low LO/High GO (L-H). Eison et al. (1986) successfully replicated earlier findings on the H-L and L-H groups' disparate attributes. In addition, students with mixed orientation scores showed mixed profiles. Besides personality traits and study habits, Wright (2012) found that the four student groupings also differ in how they communicate with instructors about grades, following a similar pattern: the H-L and L-H groups have the starkest contrasts between them.

This conceptualization of students' attitudes is consistent with a later theory on motivation, namely Achievement Goal Theory (AGT) (Svinicki, 1998, 2004). AGT posits that the kind of goal toward which one puts effort has immense effects on how it is pursued and how one feels about the process (Ames & Archer, 1988; Dweck & Leggett, 1988; A. J. Elliot & Thrash, 2001; E. S. Elliot & Dweck, 1988). In particular, it is observed that one may have either a mastery orientation or a performance orientation. A mastery-oriented individual seeks to improve ability and gain mastery of new tasks, which mirrors the description of a high LO student. A person with strong performance orientation instead wants to maintain positive judgements of their outward image. This is achieved by obtaining external validation or documentation of one's demonstrations; in the case of students, the end is a decent grade.

Later differentiated models of this theory have been proposed, such as the 2×2 achievement goal model (A. J. Elliot & McGregor, 2001) and 3×2 achievement goal model (A. J. Elliot et al., 2011). The former model introduced *approach* and *avoid* components, denoting an individual's tendencies to either strive for better outcomes or avoid worse outcomes respectively. The latter model further incorporated intrapersonal and interpersonal standards, resulting in task-based, self-based, and other-based goal orientations. Since the focus of this study is on grades, we find that the conceptual model by Eison et al. (1986) is sufficient and most suitable for our purposes.

Academic Orientations, Learning Strategy Use, and Performance

It is first necessary to distinguish between *learning* and *performance* as these terms are often used interchangeably in education literature and discourse. Dunham (1971) and Soderstrom and Bjork (2015) elaborated that learning is the process in which enduring changes are made to one's knowledge and ability, whereas performance refers to observable, usually short-term, demonstration of learning. While learning within different domains may vary in terms of specific processes, the key features still apply: interaction with the environment and peers to construct meaning or acquire skills. Learning, then, can occur without any observable shifts in behavior. The opposite is also possible, in that performance can vary not as a direct outcome of learning but due to other environmental factors such as health, mood, equipment, weather,

etc. In spite of its unreliability, performance is currently considered the best estimate of learning. And in the classroom context, a student's performance on a test is represented by a grade, which is subject to the test design, testing conditions, and the student's state of being.

Given that learning cannot be directly measured, and actual performance may be inaccurate, certain aspects of learning have been identified to be good predictors of performance in a classroom setting. One important component is the use of learning strategies. Based on the framework of self-regulated learning, learning strategy use involves the application of cognitive strategies to remember and understand the material, metacognitive strategies to plan and regulate cognition, and resource management (Corno, 1986; Corno & Mandinach, 1983; Zimmerman & Martinez-Pons, 1986, 1988). Various studies have revealed a consistent interrelationship between academic orientation, self-regulated learning strategy use, and academic achievement. Overall, learning or mastery orientations facilitate more adaptive use of learning strategies, which in turn is positively associated with performance on assessments. Findings concerning grade or performance orientations have been more mixed, though they generally still show the opposite trend: less engagement in learning and poorer exam results.

Banisaeid and Huang (2015) investigated how Chinese EFL undergraduates' motivation correlated with both self-regulated learning and language learning strategies. Their results revealed that while most Chinese learners studied English for extrinsic purposes, this motivation was significantly tied to increased use of both types of strategies. These findings were mirrored for Indonesian secondary school students (Hariri et al., 2021). They identified certain motivational components, such as self-efficacy and intrinsic task value, can strongly promote the use of learning strategies.

Eison (1981, 1982) and Eison et al. (1986) demonstrated that there are correlations between academic orientations and study habits though in American college populations. Students with high LO were found to employ more effective self-regulated study methods and hold higher responsibility for their own learning, while high GO respondents scored low on these dimensions. Moreover, test anxiety was examined and shown to have varying ties to orientation: LO students viewed that pressure as facilitative to their studies, as opposed to their GO counterparts who suffered overall higher levels of debilitating anxiety. Interestingly, students who adopted both orientations reported the highest level of debilitating test anxiety.

As mentioned, while test scores and grade averages do not reliably reveal the true level of a student's achievement, they are a convenient tool for educators and researchers to quantify the learning process. Kosnin (2007) conducted a study at a major university in Malaysia, looking into the predictive potential of self-regulated learning for academic achievement across different student levels. Their results indicated that the use of metacognitive strategies and resource management were strongly linked to higher grade point averages (GPA) of low and high achievers respectively. Surprisingly, self-efficacy was found to have either no (for low achievers) or a negative relationship (for high achievers) with GPA.

Pintrich and De Groot's (1990) findings suggested that the use of self-regulated learning among American middle school students has a significant direct relationship with exam performance. They further concluded motivational beliefs, such as self-efficacy and task value, played a facilitative role in the choice to use self-regulated learning strategies. These results were later corroborated and extended by Wolters et al. (1996). They discovered that learning and grade orientation were predictors of motivation, self-regulation, and performance. In particular, a focus on obtaining grades was strongly related to lower self-efficacy, task value, strategy use, and grades. It seems that students who were intrinsically motivated were more likely to engage deeply with the learning process, and thus performed better on assessments. Additionally, both studies noted that test anxiety is not associated with either orientation or self-regulation.

In a study of American undergraduate students, Beck et al. (1991) examined the association between academic orientations and academic performance. After controlling for initial intellectual differences in SAT scores, GO scores were negatively correlated to GPA; results for LO scores were nonsignificant. Moreover, informal discussions with students revealed that highly GO students concentrated on only material they believed would be on exams, whereas less GO students studied a wide range of learning content. It is worth noting that Beck et al. (1991) and Johnson and Beck (1988) found grade orientation to be also inversely related to the standardized SAT scores. In another study in the United States, LO was again found to be unassociated with academic results (Debicki et al., 2016). Within the Saudi Arabian context, M. Pilotti et al. (2022) instead did not discover any differences in academic performance between LO and GO students. They further added that the two orientations coexisted and interacted within the individual, with the presence of LO weakening the detrimental effects of GO.

Academic Orientations, Stress, and Mental Well-Being

The mental health of adolescents has received much attention worldwide, though the definition of the concept still varies to some extent. The terms *positive mental health* and *mental well-being* are also used interchangeably in the literature; however, there are minimal differences in intended meaning (Tennant et al., 2007). Keyes (2006) and Clarke et al. (2011) conceptualized that positive mental health entails more than just the absence of mental illness. According to the comprehensive model by Keyes (2002, 2005, 2007), a state of mental well-being then requires both *subjective well-being* (SWB), as in happiness and positive affect, and *psychological functioning* (PF), as opposed to malfunctioning. The PF criterion is further subdivided to include *psychological well-being*, which refers to dimensions of autonomy, purpose, self-

acceptance, etc. (Ryff, 1995), and *social well-being*, which reflects one's capacity to maintain positive relations with others (Keyes, 1998). This complete state model has been widely used by researchers when alluding to mental well-being. Regardless, stress, anxiety, and the like should still be of interest as related concepts (Clarke et al., 2011; Keyes, 2005).

Limited research has been conducted on the relationship between academic orientation and mental well-being. Nevertheless, there have been connections made between certain aspects of academic life – finances, the school environment, exam pressure, or an instructor's pedagogy, etc. – and mental distress (Abouserie, 1994; Everly et al., 1994). In Vietnam, similar indicators of stress were found, albeit to different degrees. H. T. Nguyễn (2009) researched causes of stress at various campuses of the Hanoi National University and concluded that they were, in order of highest to lowest prevalence: family, personal characteristics, coping ability, academic pressure, societal pressure, and psychological issues. Although some other constructs were vaguely defined, the description of academic pressure is consistent with other studies. While only exhibiting a moderate relationship for the Hanoi sample, academic pressure was more strongly related to stress for students at the Banking Academy in Ho Chi Minh City (T. N. N. Nguyễn et al., 2020). The three significant stressors identified here were personal growth, academic pressure, and financial situation.

For Swedish secondary school students, just the introduction of grading was linked to negative mental health outcomes (Högborg et al., 2021). A large-scale education reform, which extended formal grading to students in years 6 and 7, was implemented by the Swedish government in 2012. Prior to this, students in year 7 and below only received feedback on their performance. Mental health effects were measured for years 5, 7, and 9 students from multiple schools before the reform in 2010 and after in 2014. Results showed that exposure to grading led to increased academic stress and lower self-esteem.

A study on Australian law school students assessed psychological distress in relation to expectations of grades (Larcombe et al., 2012). Their findings indicated that students with severe depressive, stress, and anxiety symptoms are likely to have high expectations for their grades. In fact, high levels of distress were found not conducive to adjustment of orientation, which may exacerbate existing problems. The study also pointed out that students who did not choose to study law out of interest were more at risk of depression than those who did.

Stress, particularly academic stress, then appears to serve a partial mediator role in the relationships of interest. Both SWB and PF have been negatively linked to academic stress (Barbayannis et al., 2022; Liao & Wei, 2014; Thanoi et al., 2023). And regarding academic orientations, grade- or performance-oriented students are more susceptible to academic burnout and anxiety (Daniels et al., 2008; M. A. E. Pilotti et al., 2023; Tuominen-Soini et al., 2012). Meanwhile, learning- or mastery-oriented students demonstrate relatively higher academic satisfaction and enjoyment.

The Sociocultural Context of the Vietnamese Classroom

Finally, it is important to ground the academic orientations, learning strategy use, and mental health of Vietnamese students in the Vietnamese context. Vietnam has always been a predominantly collectivist society, marked by the Vietnamese people's connectedness to their extended families, communities, and nation. However, with modern globalization comes the Western neoliberal import of individualism, oft referred to as one's prioritization of oneself and immediate circle. These two cultural phenomena currently coexist in the societal zeitgeist and define an individual's conceptions and attitudes toward learning, achievement, and well-being to varying extents. Viewed through a collectivist lens, good learning, signified by good grades, is considered one's honorable duty and pride to their community, worthy of sacrificing one's well-being for. On the contrary, an individualist perspective of learning would promote competition, where grades indicate one's position relative to others and act as tokens for social advancement. In either case, grades still play a significant role in a person's schooling career.

The Vietnamese tertiary classroom also deserves a closer inspection as the learning environment can assert some influence on students' orientations and actions. The majority of higher education institutions in Vietnam are public colleges, universities, and academies. Public institutions are generally cheaper thanks to state funding, thus more competitive than private ones and require higher scores on the National Baccalaureate, which students take to graduate high school, to attend. It is also a common belief among the population that public universities are more prestigious than private schools. Nonetheless, instructors at any institution always strive to adapt more modern and effective pedagogies to their classrooms, such as student-centered communicative language teaching in an EFL class (Vu, 2023). Instructors also report common obstacles to student learning motivation, such as traditional assessment policies, large class sizes, learning materials, and students' own dispositions.

Based upon the above research, the following hypotheses and research question were proposed:

H₁: Students' learning strategy use and mental well-being is positively correlated with their LO scores.

H₂: Students' learning strategy use and mental well-being is negatively correlated with their GO scores.

RQ: Do learning and grade orientations interact to influence students' learning strategy use and mental well-being?

Methodology

Research Design

This quantitative study employed a correlational research design with data collected from an electronic questionnaire. This design was deemed sufficient for the purpose of investigating the existence of relationships in a new context.

Sample and Data Collection

The study was conducted at a large public university in Southern Vietnam. The target population, which numbers around 700 individuals, is limited to second- and third-year undergraduate students who are enrolled in the Bachelor of Arts in English Language. An additional criterion for selection was that these students must have enrolled in a Public Speaking module, the setting where learning strategy use variable was measured, during the latest semester. The Public Speaking module was chosen since it is a foundational skill-centric module relevant to future studies and professions, thus appealing to most students and lending itself to higher generalizability when compared with other modules. This module is open for enrollment in the second semester of a school year, usually lasting from January to May. Under these criteria, the total number of potential participants was $N = 390$ (42 sophomores and 348 juniors).

The final sample consisted of 38 undergraduate students ($n = 38$) majoring in English Language and had completed the Public Speaking module in the latest semester. Participants were recruited through convenience sampling, with recruitment emails being sent to the university email addresses of all potential participants. Only individuals who provided consent through the electronic consent form were invited to participate in an online survey via Google Forms. Participants included four second-year (10.5%) and 34 third-year students (89.5%), were primarily female ($n = 28$, 73.7%), and ranged in age from 19 to 22 years ($M = 20.87$, $SD = 0.47$). Further details on the characteristics of participants can be found in Table 1.

Table 1. Participant Characteristics

Characteristic	<i>n</i>	%
Age		
19	1	2.6
20	4	10.5
21	32	84.2
22	1	2.6
Gender		
Male	10	26.3
Female	28	73.7
English proficiency level		
A2	1	2.6
B1	11	28.9
B2	16	42.1
C1	9	23.7
C2	1	2.6
Public Speaking GPA		
6.0 – 6.9	1	2.6
7.0 – 7.9	14	36.8
8.0 – 8.9	15	39.5
9.0 – 10	8	21.1

The data collection period lasted three weeks, from late June to early July 2023. Sophomore and junior students had finished their end-of-semester examinations one month before and would be able to provide a recent account of their learning and mental well-being.

Participants were asked to complete an online survey via Google Forms, consisting of a demographic information section and a battery of scales: the LOGO-II scale (Eison et al., 1983), the Motivated Strategies for Learning Questionnaire (MSLQ) (Pintrich et al., 1991), and the Warwick-Edinburgh Mental Well-being Scale (WEMWBS) (Tennant et al., 2007). The survey items were delivered in English, accompanied by respective Vietnamese translations which were done by the researchers and then reviewed by five senior students and a faculty member.

Academic orientations were measured using the LOGO-II scale (Eison et al., 1983). The 32-item scale is divided into two 16-item subscales, one denoting attitudes, and the other denoting behaviors. The attitudes subscale contains two sets of eight statements to assess learning orientation (e.g., “I enjoy classes in which the instructor attempts to relate material to concerns beyond the classroom”) and grade orientation (e.g., “I think grades provide me a good goal to work toward”). Each attitude item is rated on a 5-point Likert scale (1 = *strongly disagree* to 5 = *strongly agree*). The behaviors subscale likewise includes eight LO statements (e.g., “I stay after interesting classes to discuss material with the instructors”) and

eight GO statements (e.g., “I try to find out how easy or hard an instructor grades before signing up for a course”). Each behavior item is also graded on a 5-point Likert scale (1 = *never* to 5 = *always*). The mean score for each orientation was computed by combining respective subsections. Previous studies using this instrument have reported acceptable reliability, with Cronbach’s alphas for LO sections ranging from .67 to .76 and GO sections ranging from .60 to .73 (Eison et al., 1983; Goldman & Martin, 2014; Williams & Frymier, 2007; Wright, 2012).

The *Motivated Strategies for Learning Questionnaire* (MSLQ) is a widely used instrument to assess student motivation and the use of learning strategies in a single course (Pintrich et al., 1991). The questionnaire includes two sections — motivation and learning strategies — and a total of 15 subscales which can be used together or modularly. For this study, items from the four subscales for elaboration, metacognitive self-regulation, time and study environment, and effort management were adopted in the final survey, for a total of 30 items. These scales were selected to accommodate the course’s characteristics but still maintain the three categories of learning strategies. The mean score of all 30 items constituted a single value for learning strategy use, and a higher score indicated more effective and adaptive use of learning strategies. Each item is rated using a 5-point Likert scale (1 = *strongly disagree* to 5 = *strongly agree*). Cronbach’s alphas reported for these scales individually ranged from .69 to .79 (Banisaeid & Huang, 2015; Goldman & Martin, 2014; Hariri et al., 2021; Kosnin, 2007; Pintrich & De Groot, 1990; Wolters et al., 1996). Participants were directed to think about their experiences during the Public Speaking module when completing this section.

The 14-item *Warwick-Edinburgh Mental Wellbeing Scale* (WEMWBS) measures a complete state of mental well-being within the previous two weeks, with items for both SWB and PF components (Tennant et al., 2007). All items are phrased positively (e.g., “I’ve been dealing with problems well”), which are rated on a 5-pointed Likert scale anchored with 1 = *never* and 5 = *always*. Reported internal consistency is in the range of .87 to .91 (Clarke et al., 2011; Tennant et al., 2007; Trousselard et al., 2016). A shorter, 7-item version, the SWEMWBS, was also developed with better psychometric properties (Stewart-Brown et al., 2009). This version, however, is noted to mostly emphasize PF and exclude SWB.

Analyzing of Data

Data collected from the online survey on Google Forms were stored and analyzed in Microsoft Excel. Participants’ information and data are kept confidential and are not shared with third parties. Data storage files are only available to the researcher for the purposes of this study.

A Spearman’s rank correlation analysis was conducted to determine the relationships of interest i.e. between each academic orientation and learning strategy use, and between each academic orientation and mental well-being. An individual’s mean scores for all variables were computed and then ranked against those of the entire sample to proceed with the Spearman’s rank correlation analysis. If more than one participant has the same score on a variable, the function returns an average rank instead.

The learning orientation score was determined from all 16 learning-oriented attitude and behavior items; the grade orientation score was calculated similarly. A higher LO or GO score indicates a stronger orientation. The mean score of all 30 items from the four MSLQ subscales constituted a single value for learning strategy use. A higher score here indicates more effective use of learning strategies. Finally, mental well-being measured by the WEMWBS was also computed as a single score, with a higher score meaning the individual is more mentally well.

For comparison purposes, a median split was first performed on the distribution of LO and GO scores to determine the four student groups described in Eison et al. (1986). The practice of using median splits to dichotomize continuous or ordinal variables is considered questionable as it tends to add errors (Rucker et al., 2015) and reduce power (McClelland et al., 2015). However, as addressed in Iacobucci et al. (2015), median splits do not lead to increased Type I and Type II errors when independent variables are uncorrelated, and the tradeoff for benefits to the study would be worth the reduced power. In our analysis, LO and GO scores were indeed found to be uncorrelated ($\rho = -.11, p > .05$), thus dichotomization via median split is valid. We stand by that the usefulness of describing the coexistence of the two orientations and comparing group differences as per the original model would outweigh the cost of power. Analyses of variance were then conducted to find any significant discrepancies in learning strategy use and mental well-being between the four groups.

Findings/Results

Before addressing the hypotheses and research question, it is noted that while the overall 30-item measure for learning strategy use was reliable, the Cronbach’s alpha for one of the four subscales adopted to create that measure was not; in particular, the subscale for effort regulation was found internally inconsistent ($\alpha = .26$). Descriptive statistics and Spearman’s rank correlations among all variables are listed in Table 2.

Table 2. Means, Standard Deviations, Reliability Coefficients, and Correlation Matrix

Variable	M	SD	α	1	2	3	4
1. LO	3.11	.42	.74	—			
2. GO	2.70	.41	.68	-.11	—		
3. Learning strategy use	3.62	.40	.89	.51***	-.34*	—	
4. Mental well-being	3.53	.63	.90	.52***	.01	.44**	—

* $p < .05$. ** $p < .01$. *** $p < .001$

H_1 predicted that LO would be positively correlated with learning strategy use and mental well-being. This hypothesis was strongly supported, with LO scores were positively related at moderate strength with learning strategy use ($\rho = .51$, $p < .001$) and mental well-being ($\rho = .52$, $p < .001$).

H_2 predicted that GO would be negatively correlated with learning strategy use and mental well-being. This hypothesis was only partially supported. GO scores were negatively related with learning strategy use, though at relatively weaker strength ($\rho = -.34$, $p < .05$). No significant relationship between GO and mental well-being was found ($p > .05$).

The research question investigated whether varying levels of LO and GO interact to produce differences in learning strategy use and mental well-being. Median splits were employed on LO scores (median = 3.06) and GO scores (median = 2.69) to divide students into four groups: High LO/High GO, High LO/Low GO, Low LO/High GO, and Low LO/Low GO. Median values used here were similar to those reported in other studies that also utilized the four-group classification (Eison et al., 1986; Wright, 2012). Table 3 contains means and standard deviations for LO, GO, learning strategy use, and mental well-being across these four groups, as well as across genders. Two one-way ANOVAs were then conducted to find if the four LOGO groups differed significantly in learning strategy use and mental well-being. All assumptions for two one-way ANOVAs were satisfied. The survey responses for each group (High LO/High GO, High LO/Low GO, Low LO/High GO, and Low LO/Low GO) followed a normal distribution. Variances were consistent across groups, ensuring homogeneity. Additionally, each participant's responses did not influence others. Both one-way ANOVAs analyses revealed that across the four groups, there were significant differences between the means for learning strategy use, $F(3, 34) = 7.31$, $p < .001$, and mental well-being, $F(3, 34) = 3.71$, $p < .05$; respective effect sizes, eta squared (η^2), were .39 and .25.

Table 3. Means and Standard Deviations Across Four LOGO Groups and Genders

Group	n	LO		GO		Learning strategy use		Mental well-being	
		M	SD	M	SD	M	SD	M	SD
H-H	12	3.29	.23	3.01	.35	3.50	.30	3.57	.45
H-L	9	3.53	.37	2.32	.32	4.04	.43	4.00	.81
L-H	9	2.77	.18	2.90	.20	3.56	.20	3.38	.38
L-L	8	2.75	.26	2.45	.22	3.38	.33	3.11	.59
Male	10	3.24	.51	2.58	.44	3.79	.53	3.76	.76
Female	28	3.06	.38	2.75	.39	3.56	.33	3.45	.57

To further determine where these differences lie, multiple *post hoc t*-tests were performed on each pair of student groups. When comparing learning strategy use, the H-L group differed significantly when compared with the other three groups: with the H-H group, $t(14) = 3.41$, $p < .01$, with the L-H group, $t(11) = 3.07$, $p < .05$, and with the L-L group, $t(15) = 3.54$, $p < .01$. Other results yielded from this series of *t*-tests were nonsignificant. Cohen's *d* was used to calculate the effect sizes of these differences. The resulting *d* values in order of pairs listed above are as follows: $d = 1.50$, $d = 1.44$, and $d = 1.72$, indicating large effects. Regarding mental well-being, the only significant difference observed was between the H-L group and L-L group, $t(15) = 2.57$, $p < .05$. The associated effect size measured was $d = 1.25$. Differences between the H-H and L-L groups, $t(18) = 1.99$, $p = .06$, and the H-L and L-H groups, $t(11) = 2.08$, $p = .06$, were also revealed, albeit marginally significant. Corresponding effect size values were $d = .91$ and $d = .98$ respectively. Relevant gender differences were also analyzed, though no significant differences were found.

Discussion

The current study sought to investigate how learning and grade orientations relate to undergraduate students' use of learning strategies and mental well-being, extending research to a new context, i.e., Vietnam. The study also took a new approach in terms of variables, whereas other studies considered similar constructs such as mastery and performance orientation, intrinsic and extrinsic motivation, task value, study habits, academic stress, etc. On the basis of previous research and arguments, a higher focus on performance grades was predicted to be associated with less effective learning and poorer mental health, and the opposite was assumed for a focus on learning. In addition, different profiles of learning and grade orientations were suggested to exhibit some discriminable characteristics. Thus, the distributions of and interactions between the two academic orientations were explored as well.

Several key findings were discovered from data analysis. Firstly, LO was positively associated with both learning strategy use and mental well-being. The relationship with learning strategy use is consistent with past works by Eison (1981, 1982), Eison et al. (1986), Hariri et al. (2021), Pintrich and De Groot (1990), and Wolters et al. (1996). Students who were driven by the learning process tended to use more learning strategies, which reflects a deeper level of engagement and self-regulation. The relationship between LO and the whole construct of mental well-being is also in line with existing research (Daniels et al., 2008; M. A. E. Pilotti et al., 2023; Tuominen-Soini et al., 2012). Considering all facets of mental well-being, the research results suggest that students who adopted a learning orientation were more inclined to experience happiness, confidence, adaptability, and an interest in other people and new ideas.

The second major finding was that GO was negatively associated with learning strategy use, but not with mental well-being. In line with the aforementioned studies on learning strategies, students who emphasized grades generally reported lower outcomes in this measure. Wolters et al. (1996) explained that such students tend to see less value in the course content, hence be less engaged in learning and self-regulation. For some students, the adoption of a grade orientation may have positively influenced their strategy use as in the case of Banisaeid and Huang (2015), which would explain the relatively smaller effect size of this relation. The more surprising result pertaining to GO was that no correlation with mental well-being was found. This may be attributable to the small sample size, which of course lowers statistical power, and the timing of data collection: the WEMWBS has only been validated for a previous 2-week period, which does not overlap with any school examinations or intensive learning. During this time, students were most likely on break, serving their summer internships, or taking general education courses; mental well-being could in turn increase because of recreational activities or decrease because of their GO in these classes. With these extraneous factors at play, any relationships or non-relationships with mental well-being could be obscured and should be interpreted with caution. Additional research is necessary to determine the true nature of the relation between GO and mental well-being.

Finally, significant interactions between varying levels of LO and GO were observed. Because these results are from performing the controversial but acceptable median split in this case, mindful interpretations of them are advised. Students in the High LO/Low GO group in particular displayed most of the significant differences with other groups in both learning strategy use and mental well-being. However, unlike Eison et al.'s (1986) and Wright's (2012) claims that the H-L and L-H groups are the most contrasting, the biggest differences here were between the H-L and L-L groups. The LO level seems to have the stronger effect in all interactions when compared to GO. Taken together, it appears that endorsing a learning orientation alone was most beneficial to students in terms of learning and mental well-being, and increasing levels of grade orientation would diminish those effects. This is consistent with M. Pilotti et al.'s (2022) findings, which found that LO attenuated the adverse role of GO. Even so, some students have practical reasons for focusing on grades like attaining financial support, adapting to a test-driven education, or familial or societal pressures; therefore, High LO/Low GO should not immediately be considered the "ideal" type of student, nor should other types be described as enduring and undesirable. Researchers and educators alike could further inquire why students adopt these orientations.

To better understand the above relationships within the Vietnamese mixed cultural context, they must be viewed through Vietnamese collectivism and individualism. These two belief systems, seemingly contrasting, can both act in varying degrees to influence how a student views their ultimate learning goals and mental well-being. High grades and achievements, as measurements of learning, can be seen both as symbols of great pride in a primarily collectivist society and as social currency from an individualistic standpoint. A grade orientation then can be conducive to the positive emotions of either fulfilling your contribution to the wider community or outcompeting peers; on the other hand, it can lead to the mental distress from fear of disappointing others or fear of losing the race. A learning orientation may also be viewed through both lenses: learning for the sake of contributing to the collective and/or learning to satisfy one's own intellectual curiosity. These sociocultural characteristics are not entirely unique to Vietnam, however. Other predominantly collectivist Asian countries with emerging individualism, such as China and Saudi Arabia, have comparable histories and cultures to Vietnam. These common elements could potentially further explain the similar findings by Banisaeid and Huang (2015), M. Pilotti et al. (2022), and M. A. E. Pilotti et al. (2023).

Conclusion

Grading has profoundly established itself in education as a form of convenient feedback for students, with both support for and backlash against it raised by educators, scholars, and other related parties. Grades, then, have great potential to influence student's behaviors and attitudes, and a deeper understanding of that influence is important for progress in changing education. However, the existence of grades alone cannot account for all differences in students' learning and mental health; a novel investigation into the effects of grades must therefore begin with academic orientations that students themselves hold. Our findings mostly agree with previous research that students who are learning oriented learn more effectively and are more mentally well, and that students oriented toward grades actually tend to learn less effectively in contrast. While the present study still has many limitations, the ultimate goals were to show that these relationships exist and bring more attention to the discussion of grading in Vietnam. In addition to contributing to the existing literature and laying the foundation for future research in this context, this and other works can also inform students, educators, and other parties about new areas of self-improvement and development of a more authentic, meaningful, and equitable education.

Recommendations

Since the field of grading and assessment has not been paid any attention in Vietnam, directions for future research are numerous. As mentioned above, any replication should address the limitations of this study by examining a larger and more diverse sample size at more appropriate times, perhaps at different education levels, mixed methods or experimental investigations could provide more explanatory or causal answers to the relationships between academic orientations and other variables. Concerning one variable specifically, since the learning setting selected was a skill-centric Public Speaking course, other types of cognitive strategies, such as rehearsal and critical thinking, were not included. Future studies could expand on this by assessing separately all categories of learning strategies in different settings that enable their use. Examining the relationships between academic orientations and performance grades themselves is also be a worthwhile avenue if exact numbers are available. Finally, an exploration into antecedents of academic orientations that were beyond the scope of this study should have much practical value. Several suggestions are as follows: student-teacher interactions, teachers' pedagogies, students' financial backgrounds, university majors, and personal factors like age, gender, and personality. While age and gender were not significant factors in this study, they may become otherwise in other contexts as cultural and societal expectations differ.

This research is an open invitation to question the practice of grading, which is now the bedrock of formal education. While the findings partially support existing literature but must be interpreted with caution, several implications can be drawn for students and educators. For students, an overemphasis on grades can be detrimental to academic life but difficult to relinquish; a focus on learning, however, is more beneficial in the long term. Self-awareness and awareness of the learning environment are recommended to adapt one's orientation as needed. As for educators, critical awareness of grades is the first step to recognizing academic orientations in students and providing support to re-orient students toward meaningful learning. Attention must also be paid to current pedagogical practices and how these influence students' orientations. Further research into grades, extrinsic motivators in general, and alternative assessment should be facilitated to expand our understanding and build an education that students deserve.

Limitations

This research is not without its many limitations. The sample size was too small ($n = 38$) to make any definite conclusions about the population, which itself was limited to only one undergraduate program. The majority of participants were female and in their third year of study, which also decreases the generalizability of results. Another vital weakness of the study was its timing within the summer semester. Not only are certain relationships affected by this as discussed earlier, students might have been less likely to check their emails and read the recruitment emails during this time. Furthermore, students' responses may have been susceptible to self-report bias, in that students could have viewed certain survey items with preconceived connotations and masked their true experiences. A more robust sample, studied at multiple different learning periods, could produce more significant or different results.

Issues with the instruments and research design used must also be taken into account. First, the reliability of the GO scale was relatively modest ($\alpha = .68$) and comparable to those reported in other studies. More salient was the abysmally low reliability of the 4-item MSLQ subscale for effort regulation at $\alpha = .26$. While we acknowledge this as a major limitation, our findings would not change if data from the effort regulation scale were dropped since individual item scores, not subscale means, were used in the final analysis. Moreover, this subscale was retained in order to describe the complete profile of relevant learning strategies. Nonetheless, further examination of these instruments is warranted within the Vietnamese context with a larger sample. Regarding research design, the correlational nature of the study does not allow for causal nor explanatory conclusions to be drawn. It is possible that, for instance, lower engagement in learning results in students settling for the minimum passing grade and becoming grade oriented. Semi-structured interviews were initially considered but later abandoned due to time and resource constraints.

Ethics Statements

This study involving human participants was reviewed and approved by the Faculty of Foreign Languages, Ton Duc Thang University. The participants provided their electronic consent to participate in this study.

Conflict of Interest

We have no known conflict of interest to disclose.

Authorship Contribution Statement

Đinh: Conceptualization, design, data collection, data analysis, drafting manuscript, editing/reviewing. Nguyễn: Critical revision of manuscript, supervision, final approval.

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