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-RESEARCH ARTICLE-

FINANCIAL SKILLS, ENTREPRENEURIAL QUALITIES, AND LEADERSHIP QUALITIES THAT INFLUENCE THE PREPARATORY BEHAVIOURS FOR BUSINESS COMPETITION OF UNDERGRADUATE STUDENTS IN THAILAND

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─Abstract─

This quantitative study aims to identify key predictors and assess their predictive strength. The sample comprised 368 undergraduate students, selected through multi-stage random sampling. Eleven sets of questionnaires, utilizing summated rating scales, were employed and subjected to confirmatory factor analysis in accordance with established standards. The findings revealed that financial literacy exhibited the strongest correlation with preparatory behaviours for business competition ($r = 0.819$). Multiple regression analysis demonstrated that the collective predictors could account for 54.82% of the variance in preparatory behaviours within the aggregate group. The results of the two-way ANOVA indicated that female students in liberal arts faculties were more inclined to engage in preparatory behaviours for business competition compared to male students in science faculties. The study identified the top three predictors as financial literacy, financial behaviour, and investment knowledge, all of which fall under the financial skills category. These findings are consistent across statistical comparisons, underscoring the importance of prioritizing financial skills development to enhance preparatory behaviours for business competition.

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INTRODUCTION

Technological advancements necessitate that businesses and society adapt to ongoing changes to remain aligned with global dynamics and the evolving economic structure. This adaptation is essential for entering an era characterized by robust innovation, which will drive the nation's economy and enhance future competitiveness. A key concept that has gained significant attention is "Entrepreneurship," which is vital not only within the economic sector but also in the broader context of human potential development. Cultivating entrepreneurial skills to promote creativity and competitiveness has emerged as a critical competency in the 21st century. The essential quality of an entrepreneur that enables an organization to compete effectively and serves as a key indicator of organizational success is leadership. A leader plays a pivotal role in driving organizational effectiveness and efficiency. Leadership is not confined to formal roles within the organization but is also reflected in individual behaviours and intrinsic traits. When an organization has employees who embody these leadership qualities, it fosters opportunities and creates competitive advantages for the organization.

Enhancing business competitiveness by establishing a competitive advantage is essential for businesses to achieve sustainable and superior profits compared to their competitors, a critical factor for long-term operations. According to Barney (1991), competitiveness is realized when a company generates economic value through returns that exceed the average, enabling the organization to achieve returns greater than the expected value from invested resources. Thus, competitiveness is akin to a measure of long-term business profitability or success, necessitating the development of resources such as personnel, business planning, and finance to meet these objectives (Kittinorarat, 2022). Research has demonstrated that organizational competitiveness is bolstered by employee commitment, characterized by ambition and achievement motivation (Aiginger et al., 2013). Moreover, organizational leaders should prioritize financial planning skills, as effective financial planning enhances financial understanding and improves business planning (Hogarth, 2010). Sound financial decision-making under various circumstances is crucial for ensuring organizational stability (Anderson, 2000). Strong financial skills enable entrepreneurs to create a competitive advantage, as effective financial planning leads to clear future operational strategies, allowing businesses to adapt to constantly changing market demands. Entrepreneurs also play a pivotal role in economic development, as their activities stimulate economic growth. Therefore, foundational entrepreneurial knowledge must be emphasized to support the emergence of new entrepreneurs, fostering confidence that Thailand possesses capable and efficient entrepreneurs who can contribute to the country's economic development and create sustainable global trade competitiveness. The education sector plays a crucial

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role in producing the necessary personnel to realize this vision. Higher education institutions must adapt to evolving contexts by focusing on the development of practical knowledge and equipping students with skills that meet the needs of both individuals and the business sector (Jassim et al., 2024). Transforming Thai universities into institutions that cultivate an entrepreneurial mindset among students will enhance learners' potential, leading to innovations that elevate both society and the economy, thereby strengthening organizational competitiveness.

Understanding the readiness levels of students in leadership qualities, financial skills, and entrepreneurial attributes is crucial for effective curriculum development. This preparation improves students' bargaining power in the job market, helps identify business opportunities, and enhances organizational competitiveness (Li et al., 2024). By assessing students' preparedness, educational institutions can evaluate the effectiveness of their entrepreneurship curricula and ensure that they develop students with the desired entrepreneurial qualities. Therefore, the researchers aim to investigate the financial skills, entrepreneurial qualities, and leadership attributes that influence preparatory behaviours for business competition (Shuyan & WenZe, 2024). This study will contribute to better preparing students for the workforce and enhancing their financial and leadership skills, which are essential for producing capable graduates and fostering increased business competitiveness in the future.

LITERATURE REVIEW

In the constantly evolving business environment, entrepreneurs must continuously adapt their strategies to establish competitive advantages. Beyond focusing on innovation and creativity within business organizations, a fundamental element that organizational leaders and entrepreneurs must prioritize is financial management knowledge, including the financial skills of entrepreneurs. These skills serve as essential tools for enhancing organizational competitiveness, which is critical for business survival amidst market competition and change. Preparing students who are about to enter the workforce or start their own businesses necessitates a robust foundation of knowledge and ongoing development to effectively navigate changes and sustainably meet the dynamic demands of the business world. Entrepreneurs play a pivotal role in driving and fostering economic growth (Audretsch et al., 2006). Education that emphasizes business management, financial acumen, creativity, and leadership (Sakdapat, 2022) enhances individual opportunities and competitiveness, thereby contributing to organizational competitiveness. However, achieving a competitive advantage requires leveraging high-quality resources, including knowledge, strategic planning, financial management, and effective leadership—factors that distinguish and strengthen an organization’s position relative to its competitors (Tariq et al., 2011).

Business Competitiveness

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Business competitiveness is a critical attribute that organizations and business leaders must cultivate to effectively respond to environmental changes. To build competitiveness, organizations require appropriate strategies that create competitive advantages by differentiating themselves from competitors in three key areas: cost leadership, differentiation, and quick response (Thompson & Richardson, 1996). Furthermore, organizational strategies should be distinctive, grounded in strong leadership and valuable internal resources (Mickeviciene & Zitkus, 2011), ultimately leading to sustainable competitive advantages (Bharadwaj et al., 1993).

Entrepreneurial Qualities

In business operations, entrepreneurs are the most critical production factor, as they integrate the three primary production factors—land, labor, and capital—through their knowledge and abilities. Without skilled and knowledgeable entrepreneurs, businesses cannot achieve success. Van der Kuip and Verheul (2004) identified four essential entrepreneurial qualities: innovation, risk-taking, proactive work, and readiness for business competition. Various interpretations of entrepreneurship emphasize different aspects. For instance, Hong et al. (2012) focused on proactive work and innovation, aligning with Zainol and Ayadurai (2011), who found a direct relationship between entrepreneurial qualities and business capability. Their research results indicate that entrepreneurial qualities are directly linked to business capability. Additionally, Fontela et al. (2006) emphasized that innovation, risk-taking, and proactive work are key mechanisms for business survival and growth. Autio et al. (2014) further demonstrated that innovative entrepreneurs contribute directly to the development of new products or services and the overall operation of the business. Other related entrepreneurial qualities include a learning orientation, achievement orientation, initiative, confidence, analytical thinking, and the ability to adapt strategic management practices.

Research indicates that successful entrepreneurship is associated with several key factors, including: 1) a strong desire to engage in business, 2) resilience in the face of failure, 3) leadership, 4) decision-making capability, 5) risk management, 6) the ability to view changes as opportunities, 7) tolerance for ambiguity, and 8) innovativeness (Lambing & Kuehl, 2003). Additional research also highlights the role of education in enhancing entrepreneurial qualities. Rose et al. (2006) found that higher levels of education contribute to improved business skills and competitive advantages. Competitive advantage is essential for guiding a business to success and achieving profits that exceed those of competitors. Developing competitive advantages requires strategies that are both valuable and distinct from those already in existence (Barney, 1991). The researchers synthesized and selected variables based on the entrepreneurial qualities identified by Van der Kuip and Verheul (2004) to develop a research tool. These widely recognized qualities, which are instrumental in measuring business success, include four key entrepreneurial attributes:

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1. Risk Taking: Decisive decision-making under uncertainty, characterized by determination and confidence in one's choices.
2. Proactive Work: Forward-looking orientation to identify business opportunities and initiate new ideas.
3. Readiness for Business Competition: Efforts to confront competition, effectively solve problems, and generate competitive advantages.
4. Innovativeness: Intent to introduce new products or services through creativity, experimentation, and the use of modern processes and technologies.

Financial Skills

Financial skills are essential for ensuring the stability, continuous growth, and sustainability of an organization's economy, as well as addressing financial inequality. The development of financial skills aims to build financial resilience for individuals and support the creation of effective financial literacy policies at the organizational level. These skills can be assessed through various indicators of financial literacy, which are reflected in individual behaviours. According to the OECD (2016), financial knowledge encompasses three key areas: Financial Knowledge, Financial Behaviour, and Financial Attitude. Financial skills are also linked to saving and investing practices, including short-term savings, retirement savings, and investment efficiency. Yıldırım et al. (2017) found that low financial knowledge is associated with increased errors in investment trend analysis and reduced success. Similarly, Gathergood (2012) demonstrated that financial skills significantly impact personal debt management, highlighting their influence on decision-making and daily spending. Enhancing financial literacy among entrepreneurs improves their ability to understand and plan for financial opportunities relevant to their business models. Research by Demirgüç-Kunt et al. (2021) indicates that financial skills enhance comprehension of financial concepts and promote efficient financial management (Kanchana, 2022). Financial skills also assist in the selection and use of financial products, including savings (Rikwentishe et al., 2015), investments, access to funding sources (Samuelsson et al., 2016), and long-term financial planning (Sieriebriak et al., 2022). The researchers focus on financial skills aligned with entrepreneurial concepts, incorporating four key factors as identified by (Hastings et al., 2013):

1. Financial Literacy: Knowledge and understanding of finance that can be applied to make effective decisions for achieving financial stability.
2. Financial Behaviour: Behaviour related to money management, including financial decision-making, borrowing, saving, and planning income and expenses.
3. Financial Attitude: Positive and negative attitudes towards finance, saving, and spending.

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4. Investment Knowledge: Understanding uncertainties or the likelihood of not achieving expected returns from investments, including the critical evaluation of the probabilities associated with different investment options.

Leadership

Leadership, defined as the process of inspiring others to find suitable paths by motivating individuals or groups to achieve goals, involves the dynamic relationship between leaders and followers in committing to change and demonstrating shared objectives (Esmer & Dayı, 2017). While many leadership qualities are consistent, they may differ in specifics. Hentschke and Caldwell (2009) describe contemporary leaders as possessing self-confidence, setting goals for themselves and their followers, and effectively navigating challenges and decision-making situations. Modern leaders also exhibit emotional maturity and engage in continuous self-development, reflecting current leadership studies (Sadykova et al., 2022). Leadership concepts have evolved to address internal and external organizational environments, including economic and social conditions, culture, communication, capabilities, interests, and specialized skills, leading to continuously changing leadership qualities (Harrison et al., 2018). Antonakis and Autio (2014) propose that contemporary leadership encompasses components such as: 1) serving as a guiding model, 2) inspiring others, 3) challenging existing processes, 4) empowering others to work effectively, and 5) encouraging and motivating. In essence, leadership is the ability to mobilize others to achieve extraordinary feats that have never been accomplished before. Leaders possess a clear vision, understand their values, and actualize these values through practice, focusing on effective performance. This study synthesizes leadership components into two main aspects based on the aforementioned concepts:

1. Having a Clear Vision: The ability to communicate future work trends to peers and others, guide them toward achieving organizational goals, analyse emerging issues, identify personal strengths and weaknesses, and systematically view situations to plan work effectively.
2. Adapting to Situations: Introducing and developing new ideas with clear goals, planning work to identify new opportunities, fostering creativity, encouraging others to share innovative ideas, and managing changes effectively and appropriately.

Biosocial Background

The literature review indicates that biosocial background characteristics significantly relate to undergraduate students (Wattanavit & Sakdapat, 2024). Data on general factors such as gender, age, year of study, faculty, GPA, and residence were collected to differentiate the sample groups for subsequent analysis (Bari et al., 2022). Based on the examination of theories and related research on preparatory behaviours for business

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competitiveness, the following research hypotheses and conceptual framework were developed:

H1: *Preparatory behaviours for business competitiveness positively correlate with high levels of financial skills.*
H2: *Predictors of financial skills, entrepreneurial qualities, and leadership skills can predict preparatory behaviours for business competitiveness by at least 40%.*
H3: *Predictors of financial skills, entrepreneurial qualities, and leadership skills can predict preparatory behaviours for business competitiveness better than any single group predictor by at least 5%.*
H4: *Male students exhibit higher preparatory behaviours for business competitiveness than female students.*
H5: *Older male students in arts faculties exhibit higher preparatory behaviours for business competitiveness than younger female students in science faculties.*

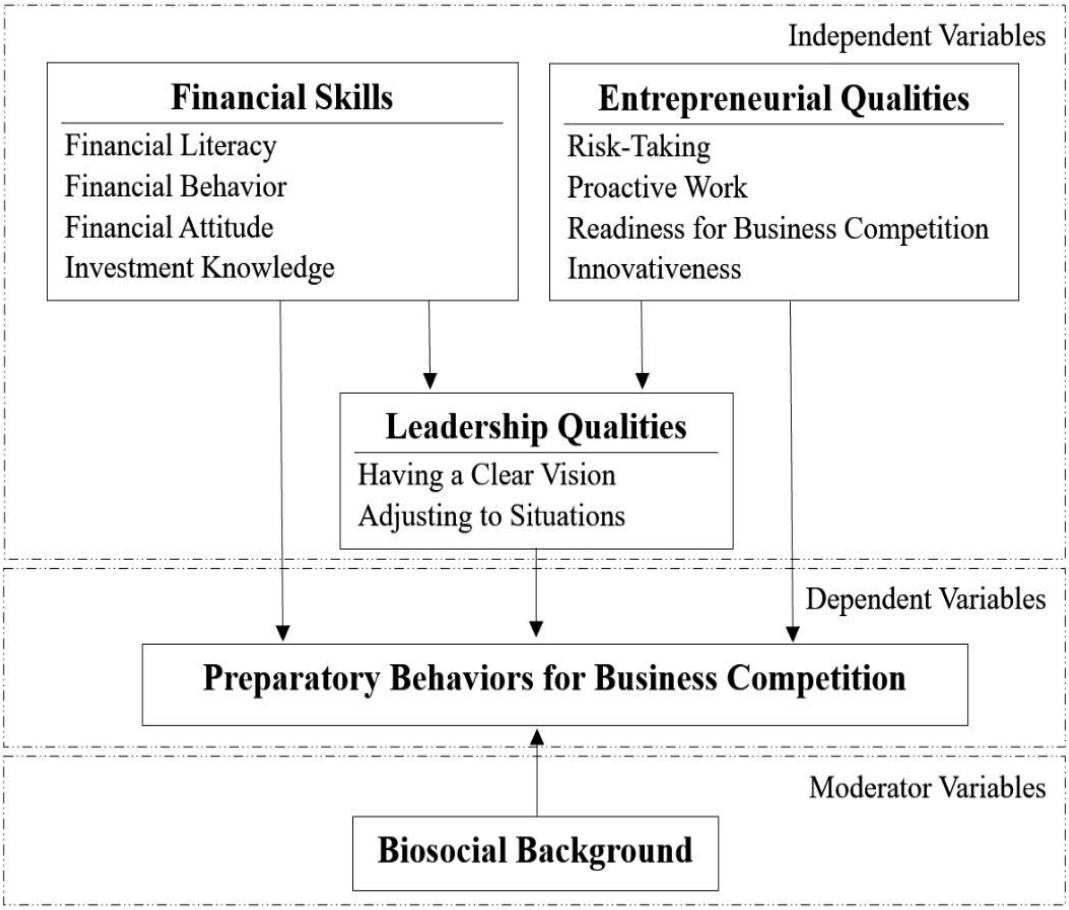

Figure 1: Conceptual Framework

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RESEARCH METHODS

Research Design

This quantitative correlational-comparative study aims to identify relationships between variables, key predictors of behaviour, and prediction quantities, as well as to compare the variance in these relationships. The findings will inform the development of targeted strategies. The study employs a questionnaire as its primary tool, comprising 11 sets of questions and one biosocial background questionnaire, all of which participants complete through self-assessment. To mitigate confounding effects from response sequence, the questionnaires are divided into three sets with alternating orders. Data collection is managed personally by the researchers, who closely monitor the participants' responses. Adhering to ethical standards, the researchers provided a clear explanation of the study's objectives, response methods, and potential benefits before participants completed the questionnaires. After completion, the researchers reviewed the responses for completeness and offered a token of appreciation for their time. This research project is approved by the Ethics Standards in Human Research at Kasetsart University under project code KUREC-SRC67/010.

Sample

The sample group for this research comprised undergraduate students. The sample size was determined using G*Power version 3.1.9.7 (Kang, 2021), with an F-test family and a Multiple Linear Regression: Fixed model and R^2 Deviation from zero. The power ($1 - \beta$) was set at 0.95, and the alpha value (α) was set at 0.05, with an effect size of 0.06. This resulted in a reliable sample size of 315 participants (Faul et al., 2009). To account for potential errors from poor-quality questionnaires, an additional 10% was included, resulting in a total sample of 350 students (Biswas et al., 2022). The sample was randomly selected using a Multi-Stage Quota Sampling Method (Hossan et al., 2023), with the following distribution: 1) Three government-supervised universities and three private universities; 2) Faculties categorized into science and arts; 3) Undergraduate students divided into 1st, 2nd, 3rd, and 4th-year students; 4) Grade Point Average (GPAX) divided into high GPAX (>3.00) and low GPAX (≤3.00). Data collection occurred between the summer semester of the 2023 academic year and the first semester of the 2024 academic year.

The research collected data from a total of 385 undergraduate students. After verifying the data accuracy, 368 responses were deemed valid, exceeding the initially calculated sample size. The demographic characteristics of the valid sample were as follows: 46.46% male and 53.53% female, with an average age of 19 years and 11 months. The sample comprised 48.36% first-year and second-year students, and 51.63% third-year and fourth-year students. Additionally, 53.26% of the students were enrolled in faculties of arts, while 46.73% were in faculties of science. The average GPAX was 3.18, and

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46.73% of the students resided with their parents.

Instruments and Ethical Considerations

The measurement instruments used in this research are summated rating scales, detailed in Table 1. These questionnaires feature statements rated on a 6-point scale ranging from "Not True at All" to "Completely True" (Emery & Levine, 2017). The quality of these instruments was assessed by five experts in leadership, organizational behaviour, and behavioural science research to ensure content validity and alignment with research objectives, content, concepts, and evaluation methods (Fernández et al., 2022). The Index of Item-Objective Congruence (IOC) for the statements ranged from 0.78 to 1.00. Following revisions based on expert feedback, the questionnaires were administered to a pilot group of 120 students whose characteristics closely matched those of the sample group. Item discrimination was analysed (Findley, 1956), and item-total correlations were examined (Hajjar, 2018). Confirmatory factor analysis (Harrington, 2009) was performed, with instruments meeting at least 3 out of 5 criteria considered acceptable. The α-Coefficient for the questionnaires ranged from 0.70 to 0.82.

Data Analysis

Inferential statistics were employed to evaluate the five hypotheses, utilizing the following analytical techniques:

Correlation Analysis

This method was applied to examine the strength and direction of relationships between variables (Gogtay, 2017).

Multiple Regression Analysis

Both Enter and Stepwise approaches were used to predict a single dependent variable from multiple predictors, with a significance threshold set at 5% to determine predictive validity (Cohen et al., 2002).

Three-Way Analysis of Variance (ANOVA)

This technique was used to assess the effects of three independent variables on the dependent variable. Post-hoc comparisons were conducted using Scheffe's test (Scheffe, 1999) to identify pairwise significant differences, with significance determined at the 0.05 level.

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Table 1: Summary of Item and Measurement Qualities

Measurements	Item Used	Range of T-Ration (t≥2.00)	Range of Item-Total r (r≥0.20)	α	Confirmatory Factor Analysis						
					$\chi 2$	df	P-value (p>0.05)	RMSEA (≤0.06)	CFI (≥0.95)	TLI (≥0.95)	SRMR (≤0.08)
1	12	2.55 – 8.21	0.24 – 0.58	0.81	84.452	61	0.0652	0.031	0.984	0.975	0.052
2	10	3.68 – 7.95	0.28 – 0.33	0.75	72.865	52	0.0589	0.035	0.985	0.982	0.044
3	10	2.37 – 6.53	0.23 – 0.51	0.70	71.239	59	0.0678	0.036	0.983	0.980	0.042
4	10	3.61 – 7.67	0.28 – 0.34	0.76	76.387	58	0.0292	0.040	0.980	0.977	0.047
5	10	2.25 – 7.58	0.22 – 0.52	0.80	75.321	57	0.0637	0.039	0.982	0.976	0.041
6	10	3.68 – 6.15	0.30 – 0.55	0.81	64.734	61	0.0595	0.038	0.985	0.981	0.032
7	10	2.29 – 8.31	0.24 – 0.49	0.79	79.137	63	0.0529	0.037	0.981	0.979	0.034
8	10	2.57 – 7.43	0.25 – 0.57	0.76	62.176	58	0.0575	0.033	0.982	0.980	0.042
9	10	2.94 – 6.52	0.23 – 0.32	0.82	68.487	57	0.0546	0.037	0.979	0.974	0.033
10	10	3.64 – 7.16	0.31 – 0.42	0.76	63.452	58	0.0598	0.032	0.988	0.973	0.034
11	10	2.28 – 7.39	0.27 – 0.45	0.78	75.678	53	0.0575	0.036	0.989	0.982	0.042

Note: *In this research, the emphasis was placed on the t-value rather than the R-value, with the selection criteria being t-value ≥ 2.00 and R-value ≥ 0.20, **The CFA uses 3 out of 5 or more passing criteria, especially where the $\chi 2$ value is not statistically significant.

***Measurement codes: 1. Preparatory Behaviours for Business Competitiveness, 2. Financial Literacy, 3. Financial Behaviour, 4. Financial Attitude, 5. Investment Knowledge, 6. Risk-Taking, 7. Proactive Work, 8. Readiness for Business Competition, 9. Innovation, 10. Having Clear Vision, 11. Adapting to the Situation

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RESULTS AND DISCUSSION

The correlation analysis Table 2 involving 368 participants revealed the following findings:

Financial Skills and Preparatory Behaviour for Business Competitiveness:

Financial Knowledge exhibited the highest positive correlation with preparatory behaviour for business competitiveness ($r = 0.819$, $p < 0.01$). Other financial skill variables also demonstrated significant positive correlations, including Financial Behaviour ($r = 0.804$, $p < 0.01$), Investment Knowledge ($r = 0.799$, $p < 0.01$), and Financial Attitude ($r = 0.792$, $p < 0.01$). These results indicate a strong association between financial skills and preparatory behaviours for business competitiveness, thereby supporting Hypothesis 1. Correlation coefficients for other financial skill variables ranged from 0.214 to 0.756.

Entrepreneurial Qualities:

Within the group of entrepreneurial qualities, proactive work showed the highest positive and significant correlation with risk-taking ($r = 0.645$, $p < 0.01$). Proactive work also correlated significantly with preparedness for business competitiveness ($r = 0.620$, $p < 0.01$). The lowest correlation within this group was observed between innovation and risk-taking ($r = 0.211$, $p < 0.01$).

Leadership Variables:

Among leadership qualities, having a clear vision was positively correlated with the ability to adapt to situations ($r = 0.513$, $p < 0.01$).

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Table 2: Mean, Standard Deviation, Correlation Coefficient of Various Variables in the Group

Variables	Mean	SD	1	2	3	4	5	6	7	8	9	10	11
1	6.132	0.707	1										
2	5.594	0.542	.819**	1									
3	5.273	0.536	.804**	.795**	1								
4	5.385	0.521	.792**	.816**	.754**	1							
5	4.486	0.424	.799**	.723**	.718**	.729**	1						
6	5.763	0.538	.512**	.628**	.695**	.659**	.653**	1					
7	4.628	0.425	.594**	.576**	.563**	.497**	.572**	.645**	1				
8	5.395	0.513	.756**	.653**	.602**	.636**	.509**	.519**	.620**	1			
9	5.192	0.570	.214**	.259**	.232**	.214**	.279**	.211**	.224**	.265**	1		
10	4.537	0.463	.482**	.458**	.436**	.544**	.480**	.418**	.417**	.401**	.369**	1	
11	5.979	0.552	.416**	.416**	.397**	.503**	.582**	.490**	.562**	.544**	.547**	.513**	1

Note: N=368. *p<.05, **p<.01; Numbers in the bracket represent reliability.

***Measurement codes: 1. Preparatory Behaviours for Business Competitiveness, 2. Financial Literacy, 3. Financial Behaviour, 4. Financial Attitude, 5. Investment Knowledge, 6. Risk-Taking, 7. Proactive Work, 8. Readiness for Business Competition, 9. Innovation, 10. Having Clear Vision, 11. Adapting to the Situation

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The results of the standard multiple regression analysis (using both Enter and Stepwise methods) for predicting preparedness behaviour for business competitiveness are summarized in Table 3. The analysis reveals that the combined predictors—financial skills, entrepreneurial qualities, and leadership—account for 54.82% of the variance in preparatory behaviour for business competitiveness. The predictors, ranked by their relative importance, are as follows: financial knowledge (β = 0.42), investment knowledge (β = 0.35), financial attitude (β = 0.32), financial behaviour (β = 0.30), business competitiveness preparedness (β = 0.29), and risk-taking (β = 0.16). Further examination across 13 subgroups indicates that the female subgroup exhibits the highest predictive capability for preparedness behaviour for business competitiveness, accounting for 64.31%.

Table 3: The Prediction Results by Multiple Regression Analysis of Preparatory Behavioural Variables for Business Competitiveness using Financial Skills, Entrepreneurial Qualities, and Leadership Qualities as Predictors.

Groups	Cases	% Prediction	Significant Predictors	β
Total	368	54.82	1, 4, 3, 2, 7, 5	.42, .35, .32, .30, .29, .16
Male	171	59.29	1, 3, 4, 2, 7	.45, .34, .32, .30, .21
Female*	197	64.31	4, 1, 3, 2, 10	.28, .17, .15, .13, .04
Younger (≤20 years)	186	42.37	1, 2, 4, 5, 4	.32, .35, .31, .28, .26
Elder (>20 years)*	182	49.62	2, 1, 3, 4, 5, 7	.37, .35, .31, .27, .25, .19
1st - 2nd year students	178	21.75	1, 2, 4, 3, 8	.35, .32, .29, .28, .25
3rd – 4th year students*	190	54.21	2, 1, 3, 4, 5, 7	.50, .49, .45, .42, .34, .22
Faculties of science	172	60.32	1, 2, 3, 6, 8, 9	.44, .40, .39, .28, .27, .25
Faculties of arts	196	63.68	3, 2, 4, 9, 10	.39, .37, .32, .28, .17
Low GPAX (GPAX≤3.00)	153	52.12	2, 1, 3, 4	.24, .21, .19, .10
High GPAX (GPAX>3.00)*	215	61.47	1, 4, 2, 3, 5, 6, 7	.42, .41, .39, .35, .32, .30, .29
Living with Parents*	172	62.34	1, 5, 4, 2, 3, 9, 10	.49, .45, .47, .42, .41, .39, .32
Living with Relatives	65	49.27	3, 4, 5, 1, 2	.51, .42, .40, .29, .27
Living Alone	131	45.65	1, 2, 3, 4, 10, 7, 5	.45, .42, .40, .39, .32, .28, .21

Note: N=368. *All beta values were statistical significance at .05 and **had a percentage difference of 5.0% or higher.

***Significant Predictors: 1. Financial Literacy, 2. Financial Behaviour, 3. Financial Attitude, 4. Investment Knowledge, 5. Risk-Taking, 6. Proactive Work, 7. Readiness for Business Competition, 8. Innovation, 9. Having Clear Vision, 10. Adapting to the Situation

Within this subgroup, the predictors in order of importance are investment knowledge (β = 0.28), financial knowledge (β = 0.17), financial attitude (β = 0.15), financial behaviour (β = 0.13), and adaptability to situations (β = 0.04). Conversely, first-year and second-year students demonstrate the lowest predictive capability at 21.75%. For

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these students, the key predictors, ranked from most to least significant, are financial knowledge (β = 0.35), financial behaviour (β = 0.32), investment knowledge (β = 0.29), financial attitude (β = 0.28), and innovation (β = 0.25).

These findings offer partial support for Hypothesis 2, which anticipated a prediction capability of 40% or higher. This threshold was met in the combined group and 12 of the subgroups, except for first year and second-year students. Additionally, only 5 subgroups demonstrated a prediction difference exceeding 5%, providing partial support for Hypothesis 3.

The results from the three-way ANOVA analysis of preparatory behaviour for business competitiveness, as detailed in Table 4, reveal significant variations based on biosocial background characteristics, specifically gender, age, and faculty. The analysis indicates that scores for preparatory behaviour for business competitiveness differ significantly based on the interaction of two independent variables: gender and faculty. Specifically, the findings are as follows: 1. Female students demonstrate higher levels of preparatory behaviour for business competitiveness compared to their male counterparts, which contradicts Hypothesis 4. 2. Students from the faculties of arts show greater preparatory behaviour for business competitiveness than those from the faculties of science

Table 4: Results of the Three-Way ANOVA Analysis of Preparatory Behaviour for Business Competitiveness, Categorized by Biosocial Background Characteristics, Gender, Age, Faculties.

Dependent Variable	F-Value						
	Gender (A)	Age (B)	Faculties (C)	A x B	A x C	B x C	A x B x C
Preparatory Behaviours for Business Competitiveness	12.591***	0.052	2.142**	0.007	12.207***	1.379	0.642

Note: *p<.05; **p<.01; ***p<.001.

Additionally, a significant variance was observed in the two-way interaction between gender and faculty. Post-hoc comparisons using Scheffe's method Table 5 revealed that female students in the faculties of arts exhibit significantly higher preparatory behaviour for business competitiveness than male students in the faculties of science. This result provides partial support for Hypothesis 5, as significant differences were noted only in the two-way interaction. Furthermore, it was found that female students generally exhibit higher levels of preparatory behaviour for business competitiveness compared to male students.

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Table 5: Scores of the Variable of Preparatory Behaviour for Business Competitiveness

Dependent Variable	Group	Comparison of Average Scores of Dependent Variables				
		High-Scored Group	**Mean**	**SE**	**95%CI Lower**	**95%CI Upper**
Preparatory Behaviours for Business Competitiveness	Gender (A)	Female	46.223	.305	44.935	47.310
	Age (B)	High	44.641	.326	43.010	45.271
	Faculties (C)	Arts	42.009	.317	41.232	43.787
	Group	**Low-Scored Group**	**Mean**	**SE**	**95%CI Lower**	**95%CI Upper**
	Gender (A)	Male	40.590	.308	39.790	42.390
	Age (B)	Low	39.572	.321	38.727	40.118
	Faculties (C)	Sciences	39.083	.323	38.491	40.916

CONCLUSION

This research has provided valuable insights into the integration of financial skills, entrepreneurial qualities, and leadership variables that influence preparatory behaviour for business competitiveness. Through the application of three distinct statistical analysis methods, the study revealed diverse findings that underscore the complex interrelationships among these variables. While some statistical outcomes supported the hypotheses fully, others showed partial or no support, resulting in mixed results. The use of multiple statistical approaches has clarified these relationships, offering a more nuanced understanding of the data. The findings highlight the significant role of financial skills, demonstrating their primary importance in predicting preparatory behaviour for business competitiveness. The study achieved a maximum predictive accuracy of 64.31% for female students, reflecting a high level of precision. The analysis effectively examined both external and internal causal factors, accurately identifying financial knowledge, financial behaviour, and investment knowledge as the top three predictors, all rooted in financial skills. However, other important predictors such as risk-taking, business competitiveness readiness, and adaptability also emerged as significant. Based on these findings, the study proposes development guidelines and policy recommendations aimed at enhancing undergraduate students' preparedness for business competitiveness.

1. Enhancing financial knowledge is essential for students' future success in entrepreneurial careers. The study reveals that some students lack adequate financial knowledge and effective financial planning skills. To address this, it is important to promote financial education through ongoing training programs, periodic assessments, and the development of savings discipline. Instruction should cover topics such as interest calculation, borrowing strategies, and low-risk investment opportunities. Collaboration with financial institutions can provide relevant information and facilitate continuous evaluation of financial knowledge

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improvements.

2. The study also identifies key aspects of students' financial behaviour, including spending and saving habits, problem-solving abilities, thoughtful purchasing decisions, timely bill payments, and information comparison before making decisions. Effective education in these areas requires joint efforts from the government, educational institutions, and financial organizations. These entities should support and enhance financial education, address financial behavioural biases, and implement policies to reduce decision-making costs for consumers in financial markets. This approach will assist students in managing their financial behaviour according to their needs.
3. Training students to develop an entrepreneurial mindset with a focus on investment knowledge is vital for generating profits. Examining case studies of successful and unsuccessful entrepreneurs will provide insights into investment strategies that contribute to competitive advantage. Furthermore, students should actively seek investment opportunities and foster continuous innovation. Providing education on financial planning and investment knowledge will promote effective financial behaviour. As students transition into the workforce, financial discipline becomes crucial for managing personal and family finances, contributing to a financially literate society and fostering sustainable financial strength.

FUTURE DIRECTIONS

Future research could benefit from incorporating a broader array of causal variables, including environmental, situational, social, and additional economic factors, to better capture the complexity and dynamism of contemporary social and economic contexts. Extending the measurement tools used in this study to similar research could facilitate comparative analyses, enhancing the understanding of variable relationships. Alternatively, qualitative research methods may provide a more nuanced insight into the underlying causes of preparatory behaviour for business competitiveness. Furthermore, employing path analysis could help elucidate the weighted components and influence pathways among the variables, offering a more detailed understanding of their interrelationships.

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