Self-Efficacy as a Moderator of Data Literacy and Employability among Philippine Accounting Students

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Abstract

As the accounting profession undergoes digital transformation, graduates must possess strong data literacy to remain competitive. Despite this shift, empirical evidence explaining how these competencies shape employability readiness among Accounting and AIS students remains limited. This study addresses this critical research gap by examining the impact of data literacy on the employability readiness of 205 graduating students from universities in Region IV-A (CALABARZON), Philippines, specifically analyzing the moderating influence of self-efficacy. Using a quantitative cross-sectional design, data from a validated survey were analyzed via descriptive statistics, Pearson correlation, and Hayes' PROCESS Model 1 moderation analysis. To test moderation, variables were mean-centered, and an interaction term (Data Literacy x Self-Efficacy) was introduced. Reliability testing confirmed internal consistency (α>0.70). Results showed high competency levels (scores >4.0/5.0) and strong positive correlations among constructs. However, the moderation analysis demonstrated that the interaction term was not statistically significant, indicating that self-efficacy does not strengthen the relationship between data literacy and employability readiness. Instead, data literacy and self-efficacy act as independent predictors of employability readiness. The study concludes that while data literacy is the primary driver of readiness, the development of personal confidence remains vital. These results underscore the necessity for academic institutions to integrate data-centered and confidence-building strategies into accounting and AIS curricula to better prepare students for the evolving demands of the modern workforce.

Keywords: *Data Literacy, Self-efficacy, Employability Readiness, Accounting Students, Digital Skills, Moderation Analysis*

1. Introduction

Technological advancements are changing the game for the accounting industry, and what was once a manual process is now a highly technical one. With Artificial Intelligence and automation taking over the more mundane tasks of bookkeeping, the role of an accountant is now to interpret data and make strategic decisions. This has led to a new reality for accounting graduates, who must now have a dual skill set that combines traditional accounting logic with highly technical knowledge—a skill set that is now promoted by the International Federation of Accountants (2023) as the new standard for the industry.

This shift in professional standards has, in turn, redefined the specific competencies required of new graduates entering the field. However, even though colleges and universities have included digital skills in their courses, it remains unclear how well these abilities prepare students for the demands of the workforce.

The need to improve data literacy in the Philippines is highlighted by the ongoing gap between what universities teach and what industries require. Despite the fact that the Philippines produces a large number of accounting graduates annually, a report by Asadon (2024) indicates that many institutions have not yet fully incorporated advanced technologies such as Artificial Intelligence and Data Analytics. This creates a gap that affects employment outcomes, as Cammayo and Gonzales (2023) found that many BS Accountancy graduates are underemployed due to the emphasis placed on board exam preparation rather than on technical and analytical skills required for the current job market. Additionally, research done by Esquilona et. al.

(2025) revealed that it is not enough to simply integrate digital tools into a classroom, as students must have "hands-on" experience using professional software to adjust to a paperless workplace.

Although the significance of these factors is acknowledged, studies that link data literacy to employability readiness among accounting and AIS students are still limited, and this is particularly true in the Philippine setting. This study seeks to investigate the relationship between data literacy and employability readiness and how self-efficacy plays a role in this relationship among graduating accounting students in Region IV-A (CALABARZON), Philippines.

As emphasized by Jasni & Kamal (2025), data literacy among Accountancy and Accounting Information Systems (AIS) students can be defined as the collective need to responsibly and effectively gather, analyze, understand, and interpret both financial and non-financial information using digital technology in technology-based business environments.

The challenge of bridging this gap is further complicated by the multifaceted nature of employability readiness in accounting. Employability readiness encompasses not only technical knowledge but also soft skills, digital abilities, and practical work skills. While students master the theory of accounting, research suggests that they often feel underprepared because their education lacks enough 'real-world' touchpoints. Cammayo and Gonzales (2024) point out that without hands-on experience with actual software and workplace scenarios, the transition from student to professional becomes much harder. It is the graduates who bring a blend of digital fluency and the ability to work well with others who truly thrive, highlighting a clear need for a more 'human-centered' curriculum that mirrors the actual demands of the office. Overall, these findings indicate that technical skills, by themselves, are not enough, and there is a need to explore how specific skills and factors such as self-efficacy interact to enhance the employability readiness of Filipino accounting graduates.

Across the world, the digital revolution in the field of accounting has altered employability skills, and more attention is now being given to analytical skills. Andriani and Wahyudi (2025) highlight that accounting education is no longer just limited to bookkeeping; more attention is now being given to data analysis to bridge the gap between academia and industry. This trend is further supported by Tiron-Tudor et al. (2025), who identified an "Expectation-Performance Gap," where students' perceived digital readiness does not match the technical demands of professional internships, especially in using AI-based tools. Besides technical skills, Suhada et al. (2025) also emphasize that digital self-efficacy, according to Social Cognitive Theory, has an important role in facilitating students in effectively applying their skills in real-life situations. Based on these global studies, it can be inferred that to be work-ready, one needs to be technically competent as well as confident enough to cope with technological shifts in the workplace. This leads to an exploration of these aspects in relation to the Philippines.

Given the identified gap in local research regarding the variables, a structured conceptual framework was established to map out the dynamics between data literacy, self-efficacy, and employability readiness. This provides a clearer vision of how these variables interact. Moreover, a conceptual framework assists in integrating knowledge of different variables to develop a more deliberate and systematic approach to linking different aspects of the research (SAGE Publications, Inc., 2021). "It acts as an 'integrating mechanism' that synthesizes concepts, assumptions, expectations, beliefs, and theories to guide the entirety of the research process (Maxwell, 2013)".

This conceptual framework is anchored on Bandura's Social Cognitive Theory, which posits that achieving academic success is more than just acquiring facts and technical skills (Bandura, 1997). Central to this theory is self-efficacy. Bandura (1997) defined Self-Efficacy as an individual's belief in their capacity to execute a plan of action in a particular situation. This "quiet confidence" determines whether a student will effectively apply their skills when faced with challenging situations. Self-efficacy is a kind of internal motivation. Even when students possess high levels of knowledge and technical skills, they may not be able to perform well if they lack belief in their own abilities (Suhada et al., 2025). Conversely, students with high self-efficacy are more likely to remain determined, successfully converting what they have learned into actual achievements. In the context of accounting and AIS programs, students with high digital self-efficacy

demonstrate greater confidence in using technology and are better prepared to meet workplace demands (Scherer et al., 2023).

Furthermore, in his book entitled Social Cognitive Theory of Personality, Bandura (1999) argued for a triadic reciprocal deterministic relationship between the individual, their behavior, and the environment, wherein all elements interact dynamically. In this study, Data Literacy is considered the environmental factor because it represents the external digital demands and technological changes in the modern accounting profession that students need to adapt to. Self-Efficacy is the personal factor, as it reflects a student's belief in their ability to learn and use digital tools effectively. Meanwhile, Employability Readiness represents the behavioral factor, as it is the observable outcome when students apply their technical knowledge and confidence in a professional setting. By relating these variables to the triadic model, the study suggests that employability readiness is not only based on technical skills, but also on the continuous interaction between the digital environment (Data Literacy) and students' internal beliefs (Self-Efficacy), which together influence professional success.

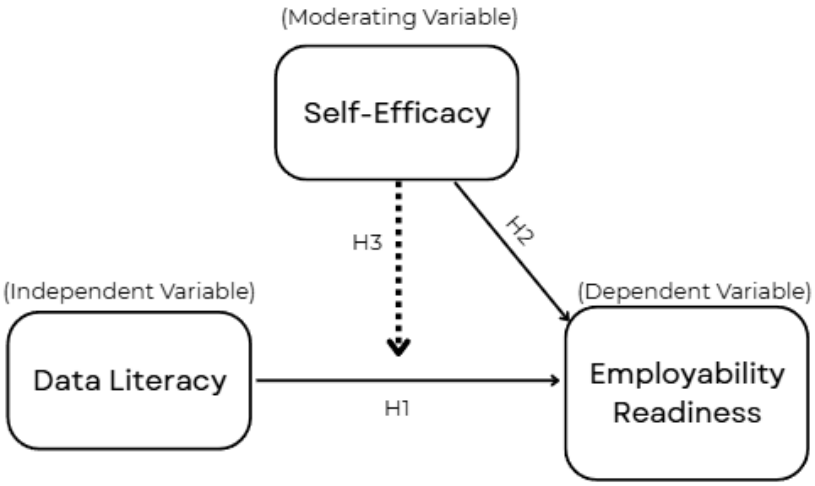

Figure 1 Conceptual Framework of the Study

As illustrated in Figure 1, the conceptual framework operates through this triadic interplay. The effectiveness of a student's professional behavior (Employability Readiness) is not determined by the digital environment (Data Literacy) alone but is significantly dependent on their internal self-belief (Self-Efficacy).

To provide a more comprehensive understanding of the interactions, each variable is explained as follows:

The Independent Variable: Data Literacy encompasses the technical competencies of an accounting and accounting information system student, reflecting abilities in understanding, interpreting, and using data effectively for analysis, reporting, and decision-making. This variable includes having the competence to analyze audit data, use ERP systems, and use Advanced Excel, SQL, and Power BI.

The Moderator: Self-Efficacy refers to the "perceived" ability of a person when completing a task. This does not refer to a person's actual capability (Mills et al., 2007, as cited in Waddington, 2023). It focuses on the individual's evaluation of one's performance and ability to do a particular task in each situation (Waddington, 2023). Specifically, this focuses on measuring how students handle digital tasks effectively.

The Dependent Variable: Employability Readiness represents the outcome of the study. This measures student's preparedness for professional roles. It refers to how prepared students are to meet professional standards and demands in the industry (Perera et al., 2020). Moreover, it focuses on assessing students' confidence in job-seeking and workplace adaptability.

2. Objectives

This study aims to accomplish the following objectives:

1) To assess the current level of Data Literacy among accounting and accounting information system students.
2) To determine the level of Self-Efficacy among students in performing technical and professional tasks.
3) To evaluate the Employability Readiness of graduating accounting and accounting information system students, focusing both on technical capability and professional adaptability.
4) To examine the significant relationship between Data Literacy, Self-Efficacy, and Employability Readiness among graduating accounting and accounting information systems students.
5) To analyze the moderating role of Self-Efficacy in the relationship between Data Literacy and Employability Readiness.

Based on the objectives and the conceptual framework, the following null hypotheses were established:

Hypotheses:

$H_0 1$: There is no significant relationship between Data Literacy and Employability Readiness.
$H_0 2$: There is no significant relationship between Self-Efficacy and Employability Readiness.
$H_0 3$: There is no significant relationship between Data Literacy and Self-Efficacy.
$H_0 4$: Self-Efficacy does not significantly moderate the relationship between Data Literacy and Employability Readiness.

3. Materials and Methods

This study utilized a quantitative research design, specifically descriptive-correlational, cross-sectional, and moderation analysis. This approach was chosen to determine whether a relationship exists between variables (Barooah, I., 2025). Specifically, the study aims to assess student's current level of Data Literacy, Self-Efficacy, and Employability Readiness while investigating how Self-Efficacy acts as a moderator in the relationship between data literacy and job readiness.

A purposive sampling technique was employed in selecting participants from different public and private universities across the CALABARZON region, specifically targeting graduating students from Bachelor of Science in Accountancy (BSA) and Bachelor of Science in Accounting Information Systems (BSAIS) programs. Primary data were collected via Google Forms from a sample of 205 graduating students, ensuring a structured, objective statistical evaluation of their insights (Brydon-Miller & Coghlan, 2014).

The survey questionnaire was adapted from prior studies to measure demographic profiles and key variables including Data Literacy, Self-Efficacy, and Employability Readiness. There were 6 items constructed per category. The responses of the participants were measured using a 5-point Likert scale (Pimentel, 2019), ranging from 'Strongly Disagree' to 'Strongly Agree'. To ensure content validity, the research instrument was validated by experts to confirm that the items clearly aligned with the research objectives. Furthermore, the data collected underwent reliability testing using Cronbach's Alpha. To ensure

internal consistency, a coefficient of 0.70 or higher was established as the threshold for reliability (Hussey et al., 2025).

To ensure the integrity of the data and protect the rights of the participants, the disseminated Google Forms contained a mandatory Informed Consent and Data Privacy Statement. Participants were informed that their involvement was voluntary and that withdrawal at any time was allowed. Moreover, it was stated that personal information gathered will only be used for academic and research purposes, ensuring full confidentiality.

Following the reliability test, the data were analyzed using IBM SPSS Statistics for descriptive analysis and Hayes' PROCESS Macro Model 1 for the moderation analysis. Descriptive statistics using frequency, percentages, mean, and standard deviation were employed to evaluate the students' level of Data Literacy, Self-Efficacy, and Employability Readiness. The software was also utilized to determine the "strength and direction of the relationship" (Gell, 2025) between the independent variable (Data Literacy), the moderating variable (Self-Efficacy), and the dependent variable (Employability Readiness).

Finally, to test Hypothesis $H_0$4, a moderation model was constructed to ascertain whether Self-Efficacy significantly acts as a moderator, thereby strengthening the relationship between technical data skills and students' readiness for the workforce. Data Literacy served as the independent variable (X), Employability Readiness as the dependent variable, and Self-Efficacy as the moderator (W).

The moderation effect of the interaction term between the independent and the moderator variable, Data Literacy x Self-Efficacy, was examined. The statistical significance of the moderation effect was determined by whether the interaction term resulted in a p-value less than 0.05, and whether the confidence intervals of the bootstrap method did not cross zero.

4. Results and Discussion

This section presents the key findings from a study conducted with 205 graduating Accountancy and Accounting Information Systems students. The first three research objectives are addressed through descriptive statistics showing students' Data Literacy, Self-Efficacy, and Employability Readiness. A correlation analysis was used to examine the relationship between Data Literacy, Self-Efficacy, and Employability Readiness. The researchers used Hayes PROCESS Model 1 to conduct a moderation analysis to test whether Self-Efficacy affected the relationship between Data Literacy and Employability Readiness. The results show that Data Literacy and Self-Efficacy can predict Employability Readiness, but Self-Efficacy did not have a significant impact on the relationship between these two factors.

Table 1 Cronbach's Alpha of Sections II, III, and IV

Variable	CA
Section II. Data Literacy	0.75
Section IV. Self-Efficacy	0.74
Section V. Employee Readiness	0.74

Note: Interpretation of Cronbach's Alpha based on George and Mallery (2021): Excellent reliability (≥ 90); Good Reliability (0.80 – 0.89); Acceptable Reliability (0.70 – 0.79); Needs Improvement (< 0.70)

To assess the reliability of the research instrument, Cronbach's Alpha was computed for each construct. As presented in Table 1, Data Literacy ($\alpha = 0.75$), Self-Efficacy ($\alpha = 0.74$), and Employability Readiness ($\alpha = 0.74$) all exceeded the acceptable threshold of 0.70. This indicates that the instrument demonstrates acceptable internal consistency, and that the items used to measure each variable are reliable.

Table 2 Descriptive Statistics of the Variables

Variable	N	Scale Range	Mean	Median	Mode	SD
Data Literacy	205	1-5	4.05	4.00	3.67	0.56
Self-Efficacy (Moderator)	205	1-5	4.00	4.00	4.17	0.58
Employability Readiness	205	1-5	4.12	4.17	3.83	0.55

Note: Interpretation of Mean based on the numerical ranges and their corresponding verbal descriptions (Pimentel, 2019): Very High (4.20 – 5.00); High (3.40 – 4.19); Moderate (2.60 – 3.39); Low (1.80 – 2.59); Very Low (1.00 – 1.79)

Table 2 presents descriptive statistics summarizing the Data Literacy, Self-Efficacy, and Employability Readiness scores of 205 respondents. All variables were measured using a 5-point Likert scale and interpreted based on established ranges (Pimentel, 2019).

Students demonstrated a high level of Data Literacy (Mean = 4.05 → High). The alignment of the median (4.00) and mode (3.67) with the mean indicates consistent responses across the sample, with a low standard deviation of 0.56, indicating that students' data literacy levels show relatively low variability, suggesting generally similar competencies in understanding and working with data. Similarly, Self-Efficacy was observed at a high level (Mean = 4.00, SD = 0.58), reflecting a strong sense of confidence and persistence among students in handling data-related tasks. The median and mode further support this, suggesting that most of the students feel capable of handling data-related tasks. Notably, students' employability readiness was likewise assessed as high (Mean = 4.12, SD = 0.55). A median of 4.17 suggests that more than half of the respondents rate their employability readiness toward the upper range of the scale. Across all three variables, the low standard deviation values indicate that responses show close clustered, suggesting consistent perceptions across the sample.

These results show that respondents possess both technical and psychological competencies. Graduating Accountancy and AIS students demonstrate strong data literacy, self-efficacy, and employability readiness, which may support their success in contemporary accounting work.

Table 3 Correlation Analysis

	Pearson Correlation	P-Value	Null Hypothesis
DL > SE	*0.66*	*<0.001*	*Reject*
ER > SE	*0.74*	*<0.001*	*Reject*
DL > ER	*0.70*	*<0.001*	*Reject*

Note: DL - Data Literacy, SE - Self-Efficacy, ER - Employability Readiness; Correlation is significant at 0.001 ($p < 0.001$); *r* correlation of 0.30 or greater indicates moderate to strong relationship.

The study adopted the guideline that correlation values of 0.30 or above create moderate to strong relationships according to Cohen (1988) with researchers using $p < 0.001$ as their significance benchmark.

Table 3 shows that all variables exhibit strong positive relationships that reach statistically significant levels. The correlation between Data Literacy and Employability Readiness is strong ($r = 0.70$, $p < 0.001$), indicating that students with better data skills demonstrate better job readiness scores. This leads to the rejection of $H_0 1$, indicating a significant relationship between the two variables.

However, this finding contrasts with Suhada et al. (2025), who argued that technical abilities alone may not guarantee employability readiness. Their study suggests that a lack of confidence or mindset required to apply the skills eventually hinders a student's transition to the workforce. While the current study confirms the importance of technical proficiency among Filipino accounting and AIS students, the divergence from the study of Suhada et al. (2025) highlights a critical point: while data skills are essential for job readiness, the psychological empowerment required to deploy those skills remains as a secondary factor that varies across different academic and professional contexts.

Self-Efficacy shows the strongest correlation with Employability Readiness ($r = 0.74$, $p < 0.001$), rejecting H_0 2. This result shows that students need self-belief and confidence to prepare themselves for work environments.

The relationship between Data Literacy and Self-Efficacy is also positive ($r = 0.66$, $p < 0.001$), meaning that students who develop technical data skills may also gain more confidence in their ability to handle data-related tasks. This also rejects $H_0$3, indicating that DL enhances an individual's SE.

The results show that technical skills and personal confidence both function as crucial elements which determine how ready someone is for employment. The researchers found H01, H02, and H03 to be rejected because the study proved that all variables had significant relationships.

Table 4 Moderation Analysis Using Hayes PROCESS Model 1

	Coeff	**se**	**t**	**p**	**LLCI**	**ULCI**
Constant	*1.8625*	*0.8747*	*2.1295*	*0.0344*	*0.1379*	*3.5872*
DL	*0.0811*	*0.2254*	*0.3598*	*0.7194*	*-0.3633*	*0.5255*
SE	*0.1929*	*0.2245*	*0.8590*	*0.3914*	*-0.2499*	*0.6356*
DL x SE (interaction)	*0.0707*	*0.0549*	*1.2875*	*0.1994*	*-0.0376*	*0.1790*

Note: DL - Data Literacy, SE - Self-Efficacy, ER - Employability Readiness

Researchers employed Hayes PROCESS Model 1 to perform a moderation analysis that assessed whether Self-Efficacy affects the relationship between Data Literacy and Employability Readiness.

The overall regression model achieved statistical significance, demonstrating $R = 0.7944$, $R^2 = 0.6310$, and $F(3, 201) = 114.5768$, $p < 0.001$, which showed that Data Literacy, Self-Efficacy and their interaction accounted for 63.10% of the variation in Employability Readiness. The model demonstrates strong overall fit.

The model showed that neither Data Literacy nor Self-Efficacy were significant predictors of Employability Readiness when both factors were tested together in the analysis.

The interaction term between Data Literacy and Self-Efficacy showed a statistical value of ($\beta = 0.0707$, $p = 0.1994$) which demonstrated that it did not reach statistical significance. The interaction term created a minor increase in explained variance ($\Delta R^2 = 0.0030$) and remained statistically non-significant, demonstrating that the interaction term fails to enhance model performance.

The results demonstrate that Self-Efficacy does not serve as a significant moderator between Data Literacy and Employability Readiness. The researchers failed to reject $H_0$4 because Self-Efficacy levels did not influence the relationship between Data Literacy and Employability Readiness.

The absence of a significant interaction effect may be attributed to the relatively high correlations among the variables (r = 0.66–0.74), which show that Data Literacy and Self-Efficacy share their explanatory variance. The shared variance between the two predictors in the regression model will diminish their individual effects on the outcome.

Furthermore, the lack of significant interaction in this study provides a clear counterview to the study of Suhada et al. (2025), which found that Self-Efficacy plays a significant role in influencing both data literacy and employability readiness. It can be assumed that the homogeneity of the population in this study, as opposed to the wide scope of the Indonesian study, led to the lack of significant interaction. Suhada et al. (2025) surveyed a wide and diverse range of individuals, from various academic disciplines and career stages, while this study only focused on graduating accounting and accounting information system students. In the Philippines, the accounting curriculum allows students to practice and master technical proficiency upon graduation. Thus, student's employability readiness is primarily based on their technical skills, while their self-belief plays a secondary factor in their career preparedness.

Overall, these findings demonstrate that Data Literacy serves as an independent factor which determines Employability Readiness for both accounting students and AIS students. This indicates that the accounting profession needs data analysis and digital tool proficiency as core competencies because organizations increasingly rely on data-driven decision-making. The study shows that students require both confidence and regular practice of data-related skills to prepare themselves for future job roles.

5. Conclusion and Recommendations

Based on the findings of the study, the study concludes that graduating students in Region IV-A possess a high level of Data Literacy and Employability Readiness. Data literacy demonstrates a high level of competency among graduating BSA and BSAIS students, reflecting solid abilities in understanding, interpreting, and using data for tasks such as analysis, reporting, and decision support. Employability Readiness achieves a high rating, indicating strong perceptions of job preparedness—encompassing workplace communication, problem-solving, and the application of data skills to real-world tasks. Self-Efficacy also reveals a high rating, characterized by a high level of confidence in handling data-related tasks (Scherer et al., 2023). This suggests that students generally feel capable of learning new tools, persisting through challenges, and applying data concepts in academic or workplace settings (Lopez-Garrido, 2025).

Moreover, the correlation analysis reveals strong, positive, and statistically significant relationships across Data Literacy, Self-Efficacy, and Employability Readiness. It reveals that Data Literacy has a positive relationship with Employability Readiness ($r = 0.70$, $p < 0.001$), indicating that students with higher data competencies feel better prepared for the workforce (Tsiligiris & Bowyer, 2021). This finding rejects the first null hypothesis $H_0 1$: There is no significant relationship between Data Literacy and Employability Readiness. These findings align with those of Gao (2024) and Tsiligiris and Bowyer (2021) who both identified Data Literacy as a vital factor in enhancing Employability Readiness. However, a contrasting perspective by Suhada et al. (2025) suggests an insignificant relationship between Digital Literacy and Employability Readiness.

While technical proficiency offers essential value for job entry, having self-belief in one's capabilities is equally vital for job readiness.

Consistent with these findings, Self-Efficacy shows an even stronger relationship with Employability Readiness at $r = 0.74$ ($p < 0.001$), reinforcing the idea that confidence and belief in one's ability are vital in workforce preparation. This leads to the rejection of the second null hypothesis $H_0 2$: There is no significant relationship between Self-Efficacy and Employability Readiness. This finding aligns with those of Gao (2024), who found that self-efficacy allows students to manage their career decisions effectively.

Furthermore, Data Literacy and Self-Efficacy are positively associated ($r = 0.66$, $p < 0.001$), indicating that increased technical capability in data tasks reinforces student confidence in their ability to perform such tasks effectively. This leads to the rejection of the third null hypothesis $H_0 3$: There is no significant relationship between Data Literacy and Self-Efficacy. This finding aligns with Suhada et al.

(2025), who suggested that technical mastery strengthens self-efficacy and effectively empowers individuals to engage actively with the digital environment.

Based on the results of the study conducted using Hayes' PROCESS Model 1 analysis, the study concluded that Self-Efficacy does not play a significant moderating role in the relationship between Data Literacy and Employability Readiness among graduating accounting and AIS students. The study found that although the overall model had high predictive power, explaining 63% of the variance in employability readiness, the interaction between Data Literacy and Self-Efficacy was statistically insignificant. The study found that the impact of Data Literacy on Employability Readiness was unconditional and remained strong and consistent, whether students had high or low Self-Efficacy. For the accounting profession, this suggests that technical skills are a primary and stable driver of career readiness. While possessing confidence is a valuable trait that ensures skills are effectively utilized, it does not diminish the foundational value of data literacy in determining students' readiness for the modern workforce. Therefore, given the lack of significant interaction, the study fails to reject the fourth null hypothesis $H_0 4$: Self-Efficacy does not significantly moderate the relationship between Data Literacy and Employability Readiness.

Based on these findings, the following actions are recommended:

Academic Institutions. The curriculum for Accountancy and Accounting Information System programs must transition from purely technical data instruction (Sidorova et al., 2018). As emphasized by Toumeh (2024), the use of advanced technological tools has become a necessity for professionals to succeed in the modern world of accounting. Thus, integrating activities such as ERP simulations, Capstone Analytics Projects, and Dashboard Development in industry settings can boost both the technical capability and confidence of students.

Students. Graduating students are encouraged to adopt a holistic approach to professional development. It is highly recommended that students pursue industry-recognized credentials in tools such as Excel, Power BI, SQL, and cloud accounting software to establish a competitive advantage. Beyond technical certifications, students must utilize high-impact experiences such as internships and leadership roles to build their professional confidence. Through independent data projects, analytics competitions, and the development of personal portfolios of dashboards and financial models, students can bridge the gap between theoretical knowledge and professional application, ensuring that their technical expertise is supported by demonstrable and industry-ready skills (Dalangin, 2023).

Industry Partners. Accounting firms are encouraged to establish structured, data-focused internship programs that provide students with real-world exposure to analytics tasks such as automated audit procedures, ERP system utilization, and real-time dashboarding. These experiential opportunities strengthen the connection between academic training and workplace expectations. Furthermore, active collaboration between industry and academic institutions is essential for updating curricula to align with current digital trends and the technologies used in professional practice (Yassin & Toumeh, 2024). This is to ensure that graduates possess both the necessary technical skills and the professional confidence to be work-ready from the moment they enter the workforce.

Future Researchers. It is recommended that future studies expand this study by applying a longitudinal approach to determine whether the scores of readiness translate into job performance one year after graduation. Moreover, while this study accounted for 63% of the variance, there is still 37% that is unexplained. Future researchers could examine other possible moderators such as Grit, Technostress, or Digital Mindset, which could give better insight into the path of employability readiness.

6. Contributions of the Study

This study provides both theoretical and practical contributions by connecting social cognitive theory with the ongoing digital transformation of the accounting profession in the Philippines.

From a theoretical perspective, the study provides empirical support for the Triadic Reciprocal Determinism under Social Cognitive Theory proposed by Albert Bandura within the academic context of

Region IV-A (CALABARZON), Philippines. By identifying Data Literacy as an environmental factor and Self-Efficacy as a personal factor, the study goes beyond traditional skill-based evaluations and demonstrates how these elements collectively determine Employability Readiness as a behavioral outcome. While the moderation analysis showed that technical skills and self-belief act independently rather than strengthening interaction, both are vital to a student's professional development. This contributes to existing literature by showing that in a highly automated and paperless accounting environment, psychological preparedness is a significant and measurable predictor of employability readiness alongside technical proficiency.

From a practical perspective, the study serves as a guide for higher education institutions and industry organizations such as the Association of CPAs in Public Practice (ACPAPP) and the Philippine Institute of Certified Public Accountants (PICPA). Since a significant portion of data literacy and self-efficacy is related, the curriculum in accounting and AIS must incorporate more "hands-on" training in professional software packages and AI tools. Furthermore, the results of this study imply that in assessing graduates, digital self-efficacy must also be considered, aside from their academic results. Ultimately, this study acts as a roadmap for the development of future Filipino accountants who are flexible in a technology-driven work environment.

7. Scope and Limitations

Although this study was able to provide valuable insights, there are limitations as follows:

- **Geographic and Academic Scope:** This study was limited in terms of location and academic discipline as it only focused on accounting and AIS students in the CALABARZON region in Laguna. Therefore, the results of this study cannot be generalized to students in other regions or to different academic disciplines.
- **Population Size:** Although this study was able to provide a sufficient population, a sample size of 205 graduating students represents only a segment of the total graduating population in the region. Having a larger and diverse population could have resulted in different nuances in the moderation effect.
- **Time Constraints:** This study was limited in scope in terms of the timeframe for data collection. Expanding this study to a longitudinal study could have further examined how these variables evolve as students transition into their professional life.
- **Subjective Bias:** Another limitation is self-reported measures that could result in social desirability bias and respondents' subjective assessment. Thus, incorporating objective, performance-based measures would be recommended to improve the evaluation.

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