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The Role of Work-Integrating Learning (WIL) Participation on Accounting Near-Graduate Students' Employment Outcomes

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ABSTRACT: Advances in information technology have modernized the business environment of the 21st century. It was predicted that "number crunching" accountant will be among the first professionals impacted. The Committee for Economic Development of Australia (CEDA) has predicted that up to 40 per cent of the workforce, or more than five million jobs, could be automated by 2035.

Australian universities are determined to find the best way of preparing work-ready students for workplace demand and offer their degrees via different modes of study. Furthermore, due to a shift in focus from the traditional life-long learning policies of academia to 'learning for the job' many universities now offer courses that combine academic study with work experience. These often involve work placements, internships, and other work-related programs, commonly known as WIL.

The objective of this study is to examine the impact of selected variables on accounting near-graduates' employment outcome. The study sample is represented by the final year near-graduate students of two Melbourne-based universities.

Using statistical techniques (logistic regression, Lasso, glmulti, principal component analysis for self-efficacy factors), the study contributed to body of knowledge in confirming the dominant significance of WIL in the employment model. The study contribution is in using three-factor structure of self-efficacy (initiative, effort, and persistence) in employment model, which, to the best knowledge of researcher, was not previously done in accounting education context.

Keywords work-ready students, workplace demands, work-related experience

I. INTRODUCTION

The purpose of this study is to examine role of various variables, including WIL participation, in preparing near-graduate business students for professional employment. The study sample data included 337 students from two Melbourne based universities; the ethical approval was obtained in due course to conduct the survey via use of questionnaire. The research instrument comprised of 5 sections and 28 questions covering demographic and personal characteristics of students, their WIL experience and the students' perception of their self-efficacy. The statistical analysis included logistic regression models, supported by glmulti and lasso techniques. In addition, principal component factor analysis was used to examine self-efficacy factors included in logistic regression, and tests of associations were carried to examine relationship between the variables and students' employment outcome.

According the *US Bureau of Labor Statistics*, employment of accountants and auditors is projected to grow 10 percent from 2016 to 2026, faster than the average for all occupations. Artificial Intelligence promoters say it can be a job-creator, not a job-killer. In general, employment growth of accountants and auditors is expected to be closely tied to the health of the overall economy.

The recent outbreak of pandemic COVID-19 exacerbated the fragility of labor market and further broadened the gap in industry expectations of universities ability to prepare work-ready graduates. Australian businesses caught up in the new industrial revolution have even more pressing talent issues with their existing workforces. The projected challenges are reflected in universities strategies to adopt to rapidly changing

environment. To remain relevant, universities need to transform their business models just as much as the organizations they will be partnering with.

The important role of universities in preparing students for professional employment has been emphasized in the literature for many decades [1, 2, 3, 4, 24]. Universities are urged to supply accounting graduates with characteristics that meet the needs of industry [5, 6, 7, 8, 25].

Work-Integrated Learning participation to ensuring work-ready graduates employability attributes is considering a key approach for enhancing graduate employability. Work-Integrated Learning could also be called industry-based learning, industry placement, internship, sandwich courses or any other programs that relate to workplace training. While the programs have different terms, they have a similar objective - to provide work-related experience for students during their university degree course.

The unique advantages of WIL programs are in providing students with an opportunity to gain work-related experience while completing their degree program. Professional placements and professional internships during university study, "turbocharge" students' job prospect, provide real word experience that will build student confidence and create a clear path to career success.

Ideally, in a WIL training program, carefully selected partners need to match with the demand of particular course outcomes and be integrated into the curriculum. Based on this approach, the learning programs can provide a significant contribution to the quality of accounting education, via continues improvement of academic framework.

The 2011 Australian Learning and Teaching Council report [8, 26] revealed good practices in Work-Integrated Learning in Australian universities through a review of 28 funded studies. The report reemphasized that it is WIL training which allows the integration of theoretical knowledge and practice skills: this integration results from students' experiences in a workplace.

According to the ALCT report, in the last decade the role of WIL in university courses has been changed since many Australian universities realize that WIL is an important aspect of their branding and business [8, 26]. Consequently, the participation rates in WIL programs of Australian universities have noticeably improved. For example, 70 percent of Griffith University's students obtained WIL experience during their course. Other universities, e.g. Queensland University of Technology, Swinburne University and Victoria University, had also been acknowledged in ALCT report, as promoting WIL in their curriculum, and making it a compulsory component of their degree programs.

WIL courses are expected to provide benefits for students to narrow the gap or 'discontinuity' between learning at university and learning 'by doing' in the workplace. These programs aim to inform students about the professional working environment, such as making them aware of expectations in the workplace and are supposed to encourage the development of relevant generic skills and the importance of ongoing learning.

It is argued that WIL programs enable universities to fulfil their commitments towards:

- providing a level of education that meets the present and future needs of industry and the community [9, 25]
- providing meaningful learning that is useful to society rather than merely making students academically knowledgeable
- strengthening partnerships with industry and community organizations [9]; and
- producing graduates with quality skills that make them more employable [10, 11, 27]. Candy and Crebert [4] referred to the problems as challenges for new graduates at the transition period, including:

-having heads full of theories, principles and information. This implies that intensive training is needed before they become 'useful' to organizations;

-with lack of generic skills, therefore, universities should pay greater attention on developing problem-solving, decision-making, teamwork and self-learning skills; and

-having wrong expectations that the workplace will provide supervision, order and control similar to the educational environment. Graduates are expected to be job ready.

In order to be able to adjust and adapt to the workplace environment, graduates should move from structured learning approaches to self-reflective learning. This would be possible in an appropriate learning framework, which assumes the inclusion of WIL programs [4, 24].

Prior research [10, 12, 13, 27] suggests that accounting students who complete WIL are more successful in finding accounting employment.

Accordingly, this study analyzed the role of WIL together with demographic characteristics and self-efficacy factors in Employment logistic regression model to reveal their impact on employment outcome of the accounting students.

II.   METHODS

The study sample consisted of 337 near-graduate accounting students from Victoria University and Swinburne University of Technology, both based in Melbourne, Australia. The selected universities are viewed as leading educational organisations, working collaboratively with industry and professional accounting bodies, especially in identifying the framework of required employment qualities for accounting students [14, 36,].

The data were collected from students who had completed more than half of their course, and teaching sessions of third year (final year) units were chosen for data collection. The collection of data occurred at the end of the academic/school year.

For the purpose of the research objectives, the questionnaire was selected as the most efficient and appropriate method for collecting the data. The practical advantages of employing a questionnaire were further highlighted by Collis and Hussey [28] including: (i) a large quantity of data could be collected in a relatively cost-effective way; (ii) gathering of data could be carried out by anyone without any sacrifice to validity and reliability of data collected; (iii) the quantified data can be processed via use of statistical software, such as SPSS (*S*tatistical *P*ackage for the *S*ocial *S*ciences, and it's used by various kinds of researchers for complex statistical data analysis); and (iv) data could be 'scientifically' and objectively analyzed.

The study considered quantifying the research questions and the data were to be analyzed statistically, therefore a questionnaire was designed for the participants of this study on this basis [29]. The questionnaire addressed the research questions which were developed as a result of the literature review.

The structured questions were designed in anticipation of different responses from accounting students; the variety of responses would comprise a valuable source of data for addressing the research questions. Students were provided with options from which they were to select the most appropriate, whether through 'Yes/No' answers, or scaled responses rated from 'Strongly disagree' to 'Strongly agree'. The items in the questionnaire requested students to provide honest responses in relation to their employment, their individual characteristics and WIL participation. The two major groups of respondents were distinguished on the basis of whether they had secured employment or not.

As already mentioned, target respondents were defined as near-graduate accounting students who had completed more than 50 percent of their degree program. The purposive sampling strategy was used, since the research was focused on near-graduate accounting students who had had an opportunity to undertake WIL training. To reach the target respondents, the researcher attended teaching sessions, distributing the questionnaires to students personally at the beginning of the teaching sessions. The literature provides evidence of low response rates for other methods of data collection including online surveys and using telephone or mail devises as research instruments [29].

Based on the feedback provided in the pilot study, the developed questionnaire was considered to be the appropriate research instrument for conducting the survey of near-graduate accounting students.
In relation to WIL aspect of the research, the questionnaire was set up to collect data on the following context:
1.   WIL and employment outcomes [7, 10, 15, 27]
2.   Activities and tasks performed during WIL training [5, 16, 30].
3.   Acquisition of skills from WIL training [17].

The section *WIL and employment* consisted of twelve questions designed to obtain student feedback on WIL programs. Only those students who undertook a WIL program during their course were required to answer.

The questions in this section aimed to collect data on the timing of their WIL program (in which year of their degree course and how long the WIL training ran); types of organizations that students joined; employment outcomes as a result of WIL training; and whether the WIL provider offered students employment.

In addition, students were required to elaborate on their feedback on WIL training delivery by evaluating a set of items focused on it. A five-point *Likert scale* was used from 'Not at all satisfied' to 'Very satisfied'. Students were also expected to explain why they were or were not satisfied by the WIL program.

The second section, *Activities and tasks performed during WIL,* included accounting-related tasks, such as recording financial transactions (manually, or using accounting software), assisting in preparation of income tax returns, financial statements, auditing activities, reconciliation of accounts, budget preparation, cost volume profit analysis, among other accounting tasks.

Students were expected to provide a feedback on approximate time spent on accounting-related tasks during WIL program, with minimum defined below 30% and the maximum above 80%. The perception of students on value of the tasks in WIL experience, and students' evaluation of themselves as contributing to organization's successful performance were measured by a five–point *Likert scale* from 'Strongly disagree' to 'Strongly agree', with a middle response of 'Neutral'. Smith's [10] measurement was applied in the questionnaire to collect students' perceptions on tasks and activities performed during WIL training, regarding their relevance to the university curriculum and learning objectives.

Section *Skills' acquisition* as a result of WIL included questions adopted, in part, from the Student Experience Survey (SES). Students were required to indicate the extent to which they believed their selected skills had improved because of their WIL placement. The skills reflected the scope of graduate capabilities defined by universities, and in accordance with the accounting professional framework, included teamwork, analytical, problem-solving and written communication skills. Students were also asked about long-term life-learning skills: being able to plan and manage their future; being confident in an unfamiliar situation. A five-point *Likert* scale was used to measure the development of the identified skills.

The research employed logistic regression, as well as *Lasso* and *R-glmulti* statistical techniques, to examine the main research questions. Consequently, the importance of the individual factors and their impact on employment and WIL participation was clearly and distinctively revealed.
WIL participation was considered in this study as a categorical variable, providing measurement of the two distinct groups of students. The group of students who have completed WIL were categorized as 1; and students who did not undertake a WIL program were assigned a 0.

The variable *employment* represents the outcome of the first logistic regression model. To define and measure the employment outcomes of accounting near-graduates, the study distinguished between two groups of final year accounting students: those who secured employment nearing the completion of their degree; and those who were not successful in obtaining employment. The two groups were assigned the numeric categorical value of 1 and 0 respectively.

III. RESULTS AND DISCUSSION

Data were collected from two Melbourne-based universities, with 32.6 percent of the total sample represented by students of Swinburne University of Technology and 67.4 percent represented by students of Victoria University.

To test the differences between the two subsets in the sample, the study employed chi-squire tests. The results indicated that the subsets of data were not significantly different. Since the differences between the two subsets of data were minimal, the full sample was deemed to be homogeneous. Therefore, the study's full data set included the survey results of both universities as a total sample. The descriptive statistics of collected data, used in the study analysis, presented in the following table.

Table 1: Descriptive statistics

	Frequency	Percent	Mean	St Deviation
Gender				
Female	183	54.3		
Male	154	45.7		
Total	337	100	0.46	0.499
Study mode				
Part time	43	12.8		
Full time	284	87.2		
Total	337	100	0.87	0.334
Age				
18-20	68	20.2		
21-30	245	72.7		
31-40	17	5		
>40	7	2.1	0.89	0.569
Total	337	100		
Residency				
Domestic	143	42.4		
International	194	57.6		
Total	337	100	0.58	0.495
Language				
NESB	209	62		
ESB	128	28		
Total	337	100	0.38	0.486
WIL completed				
No	316	93.8		
Yes	21	6.2		
Total	100	100	0.06	0.242

Secured Employment				
Yes	55	16.3		
No	282	80.7		
Total	337	100	0.16	0.370

As shown in the table, the number of students participated in WIL is below 10%, which is indicative of historically relatively low involvement of students in WIL program at the selected universities. To address the issue of imbalanced data the study used R-glmulti and Lasso to test the fitness of the model. The results justified and supported the inclusion of variable WIL in logistic regression model for analysis.

The study also performed a number of diagnostic tests, which showed that the study data did not exhibit multicollinearity. Further, the study employed *Pearson* and *Spearman* correlation to analyses correlations of the study variables. In addition, the test for normality of data, outliers, and heteroscedasticity were performed for self-efficacy variable. The results did not reveal any issues with data, and the results of testing the associated assumptions also indicated that the sample data was appropriate for conducting further statistical analyses.

The validation of the logistic regression employment model was performed by checking the accuracy rate of the estimated logistic regression model and by carrying out a split-sample validation cross-check.

The goodness-of-fit, as an indication of how well the logistic regression model fits the study data, was estimated for the dependent variable *employment*, and is assessed by examining the predictive accuracy of the model (see Table 2). The classification matrix prediction accuracy was 83.7 percent, which is relatively high according to Hair et al. [31]. Classification occurred at the cut-off value of 0.500, while the constant was included in the model. Other statistical measures that assessed the goodness-of-fit of the estimated logistic regression model involved the examination of pseudo R^2 values.

Table 2: Goodness-of-fit statistics (logistic regression model for employment)

Measure	Statistic	Value
Significance of estimated equation	p-value	0.000*
Goodness-of-fit **-2 log likelihood (pseudo R^2)** **Cox and Snell R^2** **Nagelkerke R^2**		259.683 0.112 0.191
Chi-square (df=11)		40.210
Prediction accuracy		83.7
Omnibus test of model's coefficients	p-value	0.000*

'*'indicates the significance value below p=0.01

The initial pseudo R^2, represented by a -2log likelihood (-2LL), assumes the minimization criteria. The -2LL value was equal to 259.683, which was below the value of the baseline model (294.842). Thus, the -2LL statistics indicate a good fit of the estimated logistic model. Another pseudo R^2, the Nagelkerke R^2 value of 0.191, also confirmed that the model was appropriate. With respect to Cox and Snell's R^2 (i.e., the third pseudo R^2 measure), which is derived as N^{th} root of the -2LL improvement, the value of 0.112 also confirmed the goodness-of-fit of the estimated logistic regression model. An omnibus test of model coefficients (p=0.000) also confirmed the goodness-of-fit of the estimated regression model.

Appendix A shows the results of the logistic model, which estimates the relationship between employment (the binary dependent variable) and the independent variables (*gender, residency, language, age, study mode, WIL* and self-efficacy factors: *initiative, effort and persistence*). For the variable *age*, which is split into *age1*, *age2* and *age3*, *a* Bonferroni correction method is employed to adjust the p-value for valid comparisons [35]. This correction consists of the three multiple levels of the age variable being multiplied by three. The p-values in Appendix A have already been adjusted to reflect the correction procedure.

The relationships among the independent variables in the logistic model were assessed by examining their direction and their influence on the dependent variable *employment*. This was undertaken by examining the original logistic coefficients and the exponentiated coefficients (Exp (B)). The original coefficients interpreted the directions of the relationships that were directly associated by their values. Positive coefficients indicated positive relationships and negative coefficient values indicated a negative relationship between the independent variables and the dependent variables [31].

The variables *language, age, WIL, effort, and persistence* had positive coefficients, suggesting positive relationships between these variables and the dependent outcome *(employment)*, while negative directions were identified for the variables *gender, residency, study mode and initiative*.

With respect to significance, the results show that seven independent variables out of the nine variables included in the logistic regression model demonstrated a significant relationship with employment. These were: *WIL* (p=0.000), *residency* (p=0.004), *study mode* (p=0.025), *persistence* (p=0.032), *age3* (p=0.038), *language* (p=0.049) and *initiative* (p=0.082).

Prior to examining the results of the odds ratio (refer to Appendix A) the overall relationships between the dependent outcome *(employment)* and independent variables (*gender, residency, language, age, study mode, WIL, initiative, effort, and persistence*) were further re-examined by running the logistic regression with exclusion of each variable (one at a time) from the model, to ensure robustness. The results showed the significance of *WIL* (p=0.000) in all nine regressions variations. Similarly, *residency* showed significance in all nine variations (p<0.10); and the significance of variable *age* (p<0.10) was confirmed in eight out of nine cases; the same results were obtained for variables *initiative* and *persistence*.

Furthermore, to confirm the best regression model subject to constraint on the magnitude of the coefficients, the study continued with the *Lasso* statistical technique [32] used for the employment model. The *Lasso* estimator [32] is based on a modified loss function called the l_1 norm. The increased penalty coefficients becoming zero would allow the selection of the variables for the models. The best choice of variables is determined by cross-validation with (for example) ten folds choosing the value of the variable that gives the smallest cross-validation error. *Lasso* also uses the "one-standard-error-rule" [32], taking the smallest value of *t* yielding a CV error no more than one standard error above its minimum value.

As a result of running the initial *Lasso*, the coefficient plot shown in Figure 1 below illustrates that the best fitting model involved eight independent variables. The results depended on the random seed used for cross-validation. As a result of running the procedure again, the best fitting model included only seven variables, while the one standard error rule suggested that four independent variables could be included in the model.
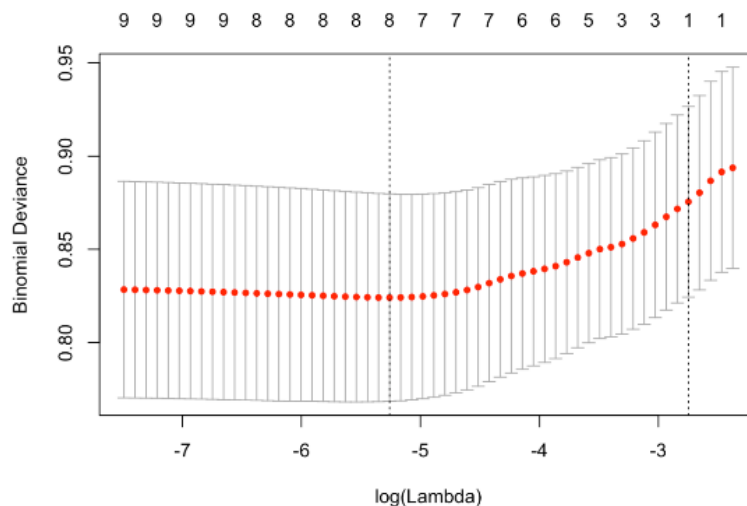

Figure 1: Lasso coefficients plot – Employment model

Further testing of the model occurred with the R statistical package, glmulti [18]. The employment model, which included nine independent variables (*gender, residency, language, age, study mode, WIL* and self-efficacy factors *initiative, effort,* and *persistence*), was tested. After running all possible models (2^9 =512), the glmulti testing found the best fit for the employment model comprised only seven independent variables: *residency, language, age, study mode, WIL* and self-efficacy factors *initiative* and *persistence.* The two variables, *gender,* and *effort,* initially included in the employment model, were also the two non-significant outcomes identified in this model. This confirms the nature of the original employment logistic model.
The variable *WIL* consistently showed maximum importance (1.0) verifying the inclusion of this variable in employment model.

Additional testing was employed on the employment model with seven independent variables via SPSS. The standard coefficient results were very close to those in the original logistic regression model, which included nine variables. The following table shows the comparison of the results, which also includes the standard coefficients obtained from the R-glmulti analysis.

Table 3: Comparison of standard coefficients of independent variables in the employment model

	Standard coefficients		
	SPSS	**SPSS2**	**R-glmulti**
Gender **('0'= Female)**	-0.109	n/a	-0.019
Residency **('0'= Domestic student)**	-1.198	-1.220	-4.899
Language **('0'= NESB)**	0.695	0.691	0.296
Age 1 (21-30)	0.780	0.759	0.413
Age 2 (31-40)	1.030	1.034	0.566
Age 3 (>40) **Age 0 (18-20: the baseline)**	2.426	2.434	1.292
Study mode **('0'= part-time)**	-0.929	-0.939	-0.951
WIL **('0'= non-WIL participation)**	2.021	2.037	2.026
Initiative	-0.399	-0.391	-0.206
Effort	0.025	n/a	0.007
Persistence	0.511	0.236	0.324
Constant	-1.895	-1.830	-1.5155

As shown in Table 3 above, the R-glmulti statistical technique confirms the significance of the variables in the original employment model. The glmulti coefficients were smaller in magnitude than the SPSS (9 independent variables) coefficients, although the shrinkage was less for the most important variables. Consequently, the glmulti coefficients for *gender* and *effort* were very small and indicate non-significance, supporting the results obtained in the original model (see Appendix A).

IV.   RESULTS OF THE EMPLOYMENT LOGISTIC MODEL

Based on the robustness of the tests undertaken for the logistic regression model for employment, this section presents the results of the original employment model, shown in Appendix A.

The *WIL* variable (p=0.000) indicates a strong significant relationship between the variable *WIL* and *employment* outcomes for the accounting near-graduate students. The *WIL* variable had the strongest impact during the study period. The result showed that the likelihood of securing employment nearing the completion of their accounting degree was 7.549 times greater for accounting students who participated in a WIL program during their degree course compared with those who did not undertake a WIL training program.

The variable *residency* (p=0.004) showed a strong significant relationship with the *employment* outcome for accounting near-graduates. The result showed that the likelihood of securing employment nearing the completion of an accounting degree for international students was 3.31 times less likely compared to domestic students.

For variables with an odds ratio of less than one, which signifies a negative coefficient (e.g., residency, study mode and initiative), the following interpretation, using residency as an example, was followed. Table 2 shows that the coefficient of the variable residency is negative (-1.198), therefore the Exp(B) is <1 (i.e., 0.302). The negative relationship indicates that the occurrence is 0.302 times more likely when the residency value is 1 (international) than when is it 0 (domestic). That is equivalent to saying the occurrence is 1/0.302= 3.31 times less likely for international students, than for domestic students. In other words, the probability of securing employment decreases as the value of the variables with negative coefficients increases (i.e., the higher number of international students will result in fewer students who secured employment).The p-value of the variable *age3* was 0.038, indicating a significant relationship between variable *age3* (of students above 40 years old) and *employment* outcomes for accounting near-graduates. The result showed that the likelihood of securing employment for students above 40 years of age was 11.313 times greater compared to students below 40 years old.

The variable *persistence* (p=0.032) indicated a strong significant relationship with *employment* outcomes for accounting near-graduates. The result showed that the likelihood of securing employment nearing the completion of an accounting degree for students with higher persistence levels was 1.667 times greater compared to students with lower levels of persistence.

The variable *study mode* (p=0.025) indicated a significant relationship with *employment* outcomes for accounting near-graduates. The result showed that students who studied part-time were 2.532 times more likely to have secured employment compared to students who studied in a full-time mode.

The variable *initiative* (p=0.082) indicated a moderately significant relationship with *employment* outcomes for accounting near-graduates. The result showed that the likelihood of securing employment nearing completion of an accounting degree for students with higher levels of initiative was 1.490 times greater compared to students with lower levels of initiative.

The variable *language* (p=0.049) showed a significant relationship with *employment* outcomes for accounting near-graduates. The result showed that the likelihood of securing employment nearing completion of an accounting degree for students with English language as their first language was 2.004 times greater compared to students from a NESB.

The variables *gender* (p=0.741) and *effort* (p=0.947) were demonstrated to have an insignificant relationship with *employment* outcomes for accounting near-graduates.

The present study's findings generally support and confirm the findings of prior studies regarding the relationship between student characteristics and their influence on the employment outcomes of accounting near-graduate students [16, 25, 30].

WIL and Employment

The independent variable *WIL* was significant (p=0.000) and suggests a very strong relationship between near-graduate employment outcomes and participation in WIL training programs. Specifically, accounting students who had completed WIL were almost eight times (7.549) more likely to secure employment than accounting students who did not undertake WIL training.

Data collected as part of the study provides a more complete understanding of the impact of WIL on securing the employment. For example, out of the 21 students who participated in a WIL program, 52.4 percent secured employment compared to only 4 percent of students who did not participate in WIL.

In addition, the present study's data showed that 85.7 percent of the surveyed students secured employment in the same organization where their WIL training was provided. This supports the work of Bui and Porter [19], and Freudenberg et al. [21], which claimed that students undertake WIL to enhance their employment outcomes.

Another potential reason for this result was identified in [7] study, which emphasized that it is via WIL training that students become engaged and motivated to learn in a social context relevant to the expectations of employers. Students develop in an environment relevant to their future employment as WIL training prepares them in 'realistic ways of thinking' about the expectations of the accounting profession.

Thus, the WIL experience prepares students psychologically for work [20]. In the WIL programs, students spent between 50 percent and 90 percent of their time on accounting-related tasks, such as 'using accounting software', 'bank reconciliation', 'auditing' and 'budgeting tasks. Their work-related training provided them with meaningful experiences beyond generic skills [33] as well as providing greater employment opportunities [10, 27].

Hence, universities use WIL programs to build students' competencies and to shape their graduate identity. They aim to make students aware of the demands and expectations of the workplace, and thus avoid "reality shock" [19] upon commencing employment. At the same time, WIL programs are likely to help employers obtain a realistic perception of the quality of graduates, particularly any gaps and limitations that need to be addressed. Consequently, WIL training programs could be seen as an effective tool for improving the quality of accounting near-graduates.

Moreover, WIL programs can prove beneficial in bringing together different stakeholders, including employers, the profession and academia [17, 19, 21], since each group shares a common goal to prepare graduates for professional accounting employment.

The study results are further supported by data collected from students who completed WIL training. The feedback from WIL participants provided further insight to their perception on the benefits of the programs, including the time spent on accounting related tasks and activities and development of their skills (Refer to Appendix B). The results revealed students' positive perception of the importance of WIL, specifically, by making students informed about the demands and expectations in the workplace, and the most required skills and attributes relevant for their professional employment.

On the other hand, as the literature shows [19], WIL programs help employers to obtain a realistic perception of the quality of graduates they hire for employment. This enables employers to be aware of the limitations in hiring near graduates due to their perceived lack of knowledge and experience.

This study's findings revealed the strong and significant role of WIL in obtaining employment for near-graduate accounting students. The realization of the importance of WIL in accounting higher education, and the benefits

of WIL training, can assist in reducing the expectation gap that exists between employers regarding accounting near-graduates' preparedness for the accounting workplace.

WIL dramatically improves the employment prospects of accounting near-graduates (p=0.000) with an odds ratio of 7.549. The findings imply that universities and practitioners could improve students' employment prospects by effective use of WIL programs on a larger scale; for instance, making it a compulsory part of a potential (or existing) accounting professional degree program. These findings are in accordance with the results of prior research, which highlighted the benefits of WIL in improving students' employment prospects [12, 22, 27].

The results of this study provide some important implications for accounting higher education with regard to improving the employment outcomes of accounting near-graduates. These include: (i) developing closer links with industry to improve student familiarity with workplace requirements; (ii) incorporating WIL programs into the accounting curriculum, such as in professional degree programs; (iii) tailoring parts of the curriculum, where possible, in order to improve student self-efficacy; (iv) promoting WIL and providing wider opportunities to access the program; and (v) examining the need for higher education reform to improve international student access to WIL participation during degree courses.

V.   CONCLUSION

WIL programs could be effective in integrating efforts of both industry and education to narrow the gap in the perception and reality of accounting graduates' employment.

Partnering with university for WIL offers significant benefits to employers, including gaining cost-effective, temporary employees and the ability to preview potential job candidates.

WIL programs provide students with the opportunity to narrow the gap between learning at university and learning at work. Such programs inform students about the real-world environment, make them aware of real expectations in the workplace, and encourage the development of relevant skills and life-long learning experience.

Students get a realistic idea of the workplace, they improve their employment prospects by building up networks, and their self-efficacy and confidence is enhanced as a result [10, 21, 23]. WIL programs, with effective partnering connections between industry and academic supervisors, and where students have a clear understating of desirable outcomes, provide greater benefits in preparing students for their future employment [10, 27, 34]

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APPENDIX A: VARIABLES IN EQUATION (EMPLOYMENT MODEL)

Variables	Standardized coefficient B	Standard Error	Wald	Sig	Exp (B)	95% C. I. for EXP(B)		Collinearity statistics	
						Lower	Upper	Tolerance	VIF
Gender ('0'= Female)	-0.109	0.331	0.109	0.741	0.896	0.468	1.716	0.937	1.067
Residency ('0'= domestic student)	-1.198	0.453	6.993	0.004***	0.302	0.124	0.733	0.642	1.558
Language ('0'= NESB)	0.695	0.420	2.740	0.049*	2.004	0.880	4.566	0.691	1.447
Age 1 (21-30) (Age 0 (18-20))	0.780	0.489	2.544	0.167	2.182	0.837	5.692	0.756	1.323
Age 2 (31-40) (Age 0 (18-20))	1.030	0.866	1.415	0.351	2.800	0.513	15.276	0.748	1.338
Age 3 (>40) (Age 0 (18-20))	2.426	1.082	5.030	0.038*	11.313	1.358	94.254	0.828	1.208
Study mode ('0'= Part-time)	-0.929	0.476	3.815	0.025*	0.395	0.156	1.003	0.805	1.242
WIL ('0'=non-WIL participation)	2.021	0.531	14.485	0.000***	7.549	2.666	21.379	0.957	1.045
Initiative	-0.399	0.230	3.026	0.082*	0.671	0.429	1.052	0.742	1.347
Effort	0.025	0.371	0.004	0.947	1.025	0.496	2.120	0.899	1.112
Persistence	0.511	0.239	4.586	0.032**	1.667	1.044	2.660	0.768	1.302
Constant	-1.895	1.797	1.112	0.292	0.150				

'*' indicates the significance value below p=0.10
'**' indicates the significance value below p=0.05
'***' indicates the significance value below p=0.01

Based on the results shown in Appendix A, the estimates and impact of the relationships of the dependent variable *employment* are:

$$Log\ (odds\ of\ employment)$$
$$= -1.895 - 0.109\ gender - 1.198\ residency + 0.695language + 0.780age1$$
$$+ 1.030age\ 2 + 2.426age3 - 0.929study\ mode + 2.021wil - 0.399initiative$$
$$+ 0.025effort + 0.511persistence$$

The results in Appendix A show that multicollinearity tests were conducted in accordance with Midi et al. (2010). Specifically, the collinearity diagnostics performed to assess multicollinearity were: (i) tolerance, which is an indication of the percentage of variance in the predictor that cannot be accounted for by the other predictors; and (ii) VIF, which is the reciprocal of tolerance and indicates the magnitude of the inflation in the standard errors associated with a particular beta weight that is due to multicollinearity. The threshold for indicating multicollinearity is tolerance levels of less than 0.1 and VIF values that exceed 10.

I.   APPENDIX B: DESCRIPTIVE STATISTICS ON WIL EXPERIENCE
Students' perception on tasks performed during WIL

Tasks performed during WIL training	Mean	Standard Deviation
Recorded financial transactions manually	0.69	0.479
Used Accounting software	0.88	0.332
Assisted in preparing Tax Returns	0.47	0.514
Bank Reconciliation	0.63	0.500
Ratio Analysis	0.47	0.514
Auditing	0.56	0.511
Budget (revenue/expenses)	0.53	0.514
Costing, break-even analysis	0.44	0.512

Students' perception on relevance of tasks performed

Types of tasks and activities	Mean	Standard Deviation
Did activities relevant to field of study	2.26	0.653
Worked with autonomy	2.47	0.513
Opportunity to do work relevant to what learned at University	1.89	0.875
Opportunity to learn new skills	2.72	0.461
Performed consequential tasks	2.65	0.493
Performed tasks important to achieving business goals	2.68	0.582

Students' perception on development of skills

Skills	Mean	Standard Deviation
WIL helped develop team skills	2.33	0.686
WIL helped to improve analytical skills	2.32	0.749
WIL helped to develop problem solving skills	2.26	0.733
Written communication skills improved	2.32	0.582
Confident to tackle unfamiliar problems	2.32	0.820
Ability to plan own work developed	2.26	0.733

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