



TECHNIUM
SOCIAL SCIENCES JOURNAL

Vol. 35, 2022

**A new decade
for social changes**

www.techniumscience.com

ISSN 2668-7798



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Engagement and Work Readiness of College Students

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Abstract. Students should actively engage in school, acquire work readiness skills or soft skills needed for employment, and be amply ready for jobs. This descriptive, comparative, correlational, and predictive study aimed to assess the relationships between student engagement and work readiness skills of 565 college students at a private university in the Philippines. The demographic variables include sex, work experience, and college enrolled in. This study used the Student Engagement in School Inventory and the Real-World Work Readiness Scale. As a whole and by college unit, sex, and paid work experience, university students were highly engaged in cognitive, affective, and behavioral dimensions. Unlike some university students, COED students were more engaged. Sex differences and paid work experience did not affect students' engagements. Soft skills, namely, motivation, maturity, personal development, organizational awareness, technical focus, interpersonal orientation, positive work attitudes, problem solving, adaptability, and resilience made them work-ready. In most areas, students' soft skills were similar. CIT students appeared less adaptable than other students, while CCJE students were more technically focused. Males are better problem-solvers, but females are more motivated and have higher organizational awareness. Those students with paid work experience had higher technical focus and were better problem-solvers because their work experience has enhanced these specific skills necessary in the workplace. Lastly, there is a strong link between engagement and work readiness, which supports the idea that student engagement enhances work readiness.

Keywords. Educational management, descriptive-comparative-correlational-predictive study, student engagement, work readiness or soft skills, sex, paid work experience, college enrolled in, Philippines

1. Introduction

Colleges and universities have long sought to prepare students for life after graduation. In order to develop work readiness skills, stakeholders must collaborate and students must actively participate in higher learning. Employers are pleased if entry-level applicants, mostly recent graduates, have the skills required by their industries.

Student work readiness is related to acquiring applicable soft skills and knowledge that warrant students' purposeful transition from a learner to a professional, giving significant contribution to the industry [1]. On the other hand, dynamic students' engagement while earning a university degree, serves as students' groundwork for life and work after graduation. Preparing learners for employment has become an expected outcome of higher and postsecondary educational programs, regardless of discipline or degree level [2]. However,

many employers shared alarming reports and anecdotal evidence showing a skills gap between what college students possess now and what employers want them to demonstrate at work [3]. A study by the World Bank revealed that while the Philippines produces over half a million college graduates annually, not all of them may have the skills needed to land a job in larger, more innovative companies [4][4]. Moreover, Philippine Statistics Authority (PSA) reported in January 2018 that 2.3 million unemployed persons were resulting in an unemployment rate of 5.3 percent [5]. Likewise, underemployed persons were estimated at 7.5 million persons corresponding to an underemployment rate of 18.0 percent. Based on educational attainment, 21.9 percent of the unemployed were graduates. Yet, many people believe a career-ready person expands their knowledge and experience and maximizes their strengths and talents to add value to the workplace and community through their performance, skills, diligence, ethics, and responsible behavior [6].

There is a dearth of local and global studies about the relationship between student engagement and work readiness. In connection with this specific gap and the said mismatch between work readiness skills and industry needs, the researcher purposely conducted this study to arouse among higher education institutions the drive to revisit their institutional objectives, reevaluate their programs, and hone their students' soft skills and competencies to match the demands of the industry.

This study's objectives were to firstly assess the degree of engagement in terms of affective, behavioral, and cognitive engagement of college students at a Catholic university when they are taken as a whole and when grouped according to sex, paid work experience, and the college they were enrolled in. Secondly, this study is also intended to assess the students' degree of work readiness in terms of the following soft skills: motivation, maturity, personal growth/development, organizational awareness, technical focus, interpersonal orientation, attitudes toward work, problem-solving, adaptability, and resilience as a whole and classified according to the variables mentioned above.

Specifically, the study sought to answer the following questions: (1) Is there a significant difference in college students' degrees of engagement when they are grouped according to sex, college, and paid work experience? (2) Is there a significant difference in college students' degrees of work readiness when they are grouped according to the selected variables? (4) Is there a significant relationship between college students' engagement and work readiness? (5) Do affective, behavioral, and cognitive engagements predict the work readiness of college students?

2. Framework of the Study

This study theorized that student engagement and work readiness are correlated, that is, the higher the degree of students' engagement, the higher their degree of readiness for work.

This study is anchored into the Experiential Learning Theory by Kolb [7]. According to this theory, individuals create knowledge by transforming their lived experiences into cognitive frameworks. This theory suggests the first stage is a period of real experience during which a new situation is encountered and interpreted; as a result, students must participate in curricular, co-curricular, and extracurricular activities. Students must engage in a variety of cognitive, behavioral, and affective activities [8]. Student engagement is the learners' extent of school involvement so that upon graduation, this overall school experience has provided them with suitable academic and social capabilities necessary for tertiary educational decisions and future employment [9]. Through engaged learning, Kearsley and Shneiderman [10] posited that all student activities involve active cognitive processes such as creating, problem-solving,

decision-making, and evaluation. In addition, students are motivated to learn due to the meaningful nature of the learning environment and activities. The next two stages enable learners to see any inconsistencies between experience and understanding, making sense of the new experience and resulting in an idea or reworking of intangible concepts the individual has learned from their experience. By adapting to these abstract ideas and embodying them in their craft, students also need to hone their soft skills if they want to be work-ready. Furthermore, cognitive, affective, and behavioral engagements are indicative of work readiness [11], as articulated in the dynamics of students' curricular training and evidenced by the degree of their motivation, maturity, driving personal growth and development, organizational awareness, technical focus, interpersonal orientation, attitudes toward work, competence in problem-solving, adaptability, and resilience [12].

3. Methodology

This study used descriptive, comparative, correlational, and predictive research designs, utilizing particularly survey questionnaires. This study's respondents were college students officially enrolled at a Catholic university. A representative sample size of 565 was drawn from the total population using the online Raosoft calculator with a 5% margin of error at a 99.96% level of confidence. Moreover, to measure the students' engagement, the researcher used a 33-item standardized instrument, the Student Engagement in School (SES) Inventory by Lam et al. [13]. On the other hand, work readiness was measured by a 40-item Real-World Work Readiness Scale (RWWRs), an adapted version of the Work Readiness Scale (WRS) by Caballero and Walker [14] and the 100-item Bangladesh Graduate Work Readiness Scale by Salazar and Sattar [12]. To establish its validity, experts validated the instrument using the Laswhe Content Validation Ratio. The validity index of this Real-World Work Readiness Scale (RWWRs) used in this study was set at .85, which is highly acceptable. Furthermore, reliability indices were determined using Cronbach's alpha through a pilot test with 30 college students. The reliability index for the Student Engagement in School (SES) is 0.90, interpreted as excellent, while the 40-item Real-World Work Readiness Scale (RWWRs) has a reliability index of .83, interpreted as good.

4. Results and Discussion

The respondents who constituted the sample population were the 565 students out of 3,716 college students who were officially enrolled at this Catholic university during the Second Semester of Academic Year 2018- 2019.

Table 1. Profile of the Participants

Variables	n	Percentage
College		
College of Arts & Sciences (CAS)	85	15.04
College of Allied Medical Health Sciences (CAMHS)	82	14.51
College of Business & Accountancy (CBA)	116	20.53
College of Criminal Justice Education (CCJE)	68	12.04
College of Education (COED)	53	9.38
College of Engineering (COENG)	133	23.54
College of Information Technology (CIT)	28	4.96
Sex		
Males	238	42.12

Females	327	57.88
Paid Work Experience		
Without work experience	456	80.71
With work experience	109	19.29

Engagement is more than involvement or participation; it requires feelings and sense-making as well as activity. Focusing on engagement at the school level, Fredricks et al. [8] usefully identify three dimensions of student engagement, namely, behavioral, emotional or affective, and cognitive engagement. The results of the study yielded the following findings: Generally, students in the university, as a whole, were highly engaged ($M = 3.20$; $SD = 0.28$) as well as in the three dimensions when grouped according to college unit, sex, and paid work experience. Respondents appeared to actively participate in school-related activities and have favorable attitudes when engaging with others. According to Astin [15], the respondents' high level of behavioral, cognitive, and affective engagement suggests that desirable academic and vocational outcomes are being developed through their active involvement in academic and co-curricular activities to master the discipline and hone the craft or skills that the activities promote. Behavioral and affective engagements show students' school interactions with teachers, classmates, and peers, according to the study. Engagement requires quantitative and qualitative involvement, and the amount of energy invested varies by student.

Moreover, preparation for success in the real world of work is one of the most important goals of college education, so it makes sense that students become aware that their school engagement can help them succeed in the workplace after they graduate

Table 2. Degree of Engagement as a whole and in terms of Affective, Behavioral and Cognitive Engagements among College Students when they are Taken as a Whole and Grouped According to College Unit, Sex, and Paid Work Experience

VARIABLE	ENGAGEMENT			Affective			Behavioral			Cognitive		
	M	SD	Int	M	SD	Int	M	SD	Int	M	SD	Int
College												
CAS (n=85)	3.23	0.26	Hi	3.47	0.31	Hi	2.91	0.33	Hi	3.38	0.41	Hi
CAMHS (n=82)	3.15	0.27	Hi	3.30	0.38	Hi	2.87	0.33	Hi	3.30	0.40	Hi
CBA (n=116)	3.16	0.27	Hi	3.31	0.37	Hi	2.85	0.31	Hi	3.35	0.40	Hi
CCJE (n=68)	3.28	0.28	Hi	3.56	0.35	VH	3.02	0.30	Hi	3.32	0.42	Hi
COED (n=53)	3.34	0.29	Hi	3.53	0.33	VH	3.01	0.36	Hi	3.52	0.39	VH
COENG (n=133)	3.15	0.29	Hi	3.37	0.40	Hi	2.89	0.35	Hi	3.24	0.43	Hi
CIT (n=28)	3.15	0.27	Hi	3.27	0.31	Hi	2.90	0.26	Hi	3.30	0.49	Hi
Sex												
Male (n=238)	3.19	0.30	Hi	3.40	0.41	Hi	2.93	0.34	Hi	3.29	0.43	Hi
Female (n=327)	3.20	0.27	Hi	3.40	0.34	Hi	2.89	0.33	Hi	3.36	0.41	Hi
Paid Work Experience												
Without experience (n=456)	3.19	0.28	Hi	3.39	0.37	Hi	2.91	0.33	Hi	3.31	0.42	Hi
With experience (n=109)	3.23	0.28	Hi	3.43	0.36	Hi	2.93	0.32	Hi	3.39	0.40	Hi
As a Whole (n=565)	3.20	0.28	Hi	3.40	0.37	Hi	2.91	0.33	Hi	3.33	0.42	Hi

Hi = High degree; VH = Very High degree

Work readiness increases a person's value because he or she has prepared for all possible job requirements. Work readiness means being ready for any challenge, problem, or situation at work [16]. [16] Workplace readiness skills or soft skills are important because they guarantee that workers possess the basic academic, critical-thinking, and personal skills necessary to maintain employment. Motivation, maturity, personal development, organizational awareness, technical focus, interpersonal orientation, positive attitudes toward work, problem solving, adaptability, and resilience are essential for optimal job performance [12]. Concerning the respondents' work readiness, collectively, they were highly ready for work ($M = 3.40$; $SD = 0.33$) and in specific areas of personal development, organizational awareness, technical focus, interpersonal orientation, problem-solving, adaptability, and resilience.

All subgroups categorized according to college, gender, and paid work experience were work-ready. In areas of motivation, professional maturity, and work attitudes, respondents showed remarkable job readiness. Graduates with work motivation are work-ready [17] and those who are strongly motivated consequently are satisfied with their jobs [18]. According to Lent et al. [19], basic academic and career interests develop and educational and career choices are made, and respondents' overall high job readiness validates this claim. Academically engaged, these students build soft skills that will help them find jobs. That is, until these students can prove they are job-ready in the real world.

Table 3.A. Degree of Work Readiness in Terms of Motivation, Maturity, Personal Growth/Dev't., Organizational Awareness, and Technical Focus among College Students when Taken as a Whole and When Grouped According to College Unit, Sex, and Paid Work Experience

Variable	WORK READINESS SKILLS			Motivation			Maturity			Personal Growth/Development			Organizational Awareness			Technical Focus		
	M	SD	Interpretation	M	SD	Interpretation	M	SD	Interpretation	M	SD	Interpretation	M	SD	Interpretation	M	SD	Interpretation
College																		
CAS (n=85)	3.4	0.3	Hi	3.6	0.3	VH	3.5	0.3	VH	3.5	0.4	VH	3.4	0.4	Hi	3.2	0.5	Hi
	2	2		4	9		2	9		4	3		3	4		4	0	
CAMHS (n=82)	3.3	0.3	Hi	3.6	0.3	VH	3.5	0.3	VH	3.4	0.4	Hi	3.3	0.4	Hi	3.1	0.4	Hi
	8	0		6	8		5	9		3	3		1	1		5	4	
CBA (n=116)	3.3	0.3	Hi	3.6	1.0	VH	3.4	0.4	Hi	3.4	0.4	Hi	3.4	0.4	Hi	3.1	0.4	Hi
	8	3		7	7		5	1		7	4		0	0		5	9	
CCJE (n=68)	3.4	0.3	Hi	3.6	0.4	VH	3.4	0.4	Hi	3.4	0.4	Hi	3.3	0.4	Hi	3.3	0.4	Hi
	2	4		0	3		8	4		9	3		8	4		1	7	
COED (n=53)	3.4	0.3	Hi	3.6	0.3	VH	3.6	0.4	VH	3.6	0.4	VH	3.4	0.4	Hi	3.3	0.4	Hi
	9	3		9	8		0	1		0	0		3	9		2	5	
COENG (n=133)	3.3	0.3	Hi	3.5	0.4	VH	3.5	0.4	VH	3.4	0.4	Hi	3.3	0.4	Hi	3.1	0.5	Hi
	9	4		7	9		3	2		8	5		6	3		1	0	
CIT (n=28)	3.3	0.3	Hi	3.4	0.5	Hi	3.4	0.4	Hi	3.4	0.4	Hi	3.3	0.5	Hi	3.2	0.4	Hi
	1	5		6	0		6	1		2	6		3	1		6	5	
Sex																		
Male (n=238)	3.3	0.3	Hi	3.5	0.4	VH	3.5	0.4	VH	3.4	0.4	Hi	3.3	0.4	Hi	3.1	0.4	Hi
	8	4		7	5		0	3		7	3		4	5		9	9	
Female (n=327)	3.4	0.3	Hi	3.6	0.7	VH	3.5	0.4	VH	3.5	0.4	VH	3.4	0.4	Hi	3.2	0.4	Hi
	1	2		7	1		2	0		0	3		1	2		0	8	
Paid Work Experience																		
Without experience (n=456)	3.3	0.3	Hi	3.6	0.6	VH	3.5	0.4	VH	3.4	0.4	Hi	3.3	0.4	Hi	3.1	0.4	Hi
	9	3		3	5		2	1		8	4		7	2		7	8	
With experience (n=109)	3.4	0.3	Hi	3.6	0.4	VH	3.5	0.4	VH	3.5	0.4	VH	3.4	0.4	Hi	3.3	0.4	Hi
	4	4		0	6		0	2		2	3		2	7		1	8	
As a Whole (n=565)	3.4	0.3	Hi	3.6	0.6	VH	3.5	0.4	VH	3.4	0.4	Hi	3.3	0.4	Hi	3.2	0.4	Hi
	0	3		3	2		1	1		9	3		8	3		0	8	

Hi = High degree; VH = Very High degree

Table 3.B. Degree of Work Readiness in Terms of Interpersonal Orientation, Attitudes to Work, Problem-solving Adaptability, and Resilience among College Students when Taken as a Whole and When Grouped According to College Unit, Sex, and Paid Work Experience

Variable	Interpersonal Orientation			Attitudes to Work			Problem Solving			Adaptability			Resilience		
	M	SD	Inter- pre-tatio n	M	SD	Inter- pre-tatio n	M	SD	Inter- pre-tatio n	M	SD	Inter- pre-tatio n	M	SD	Inter- pre-tatio n
College															
CAS (n=85)	3.4	0.4	Hi	3.5	0.4	VH	3.2	0.4	Hi	3.3	0.4	Hi	3.2	0.4	Hi
	6	4		4	1		7	9		3	8		4	8	
CAMHS (n=82)	3.4	0.5	Hi	3.5	0.4	VH	3.2	0.4	Hi	3.3	0.5	Hi	3.2	0.5	Hi
	0	0		3	3		0	4		5	1		5	7	
CBA (n=116)	3.4	0.4	Hi	3.5	0.4	VH	3.1	0.4	Hi	3.3	0.4	Hi	3.2	0.4	Hi
	0	7		0	0		6	8		7	2		0	4	
CCJE (n=68)	3.3	0.4	Hi	3.4	0.4	Hi	3.2	0.4	Hi	3.4	0.4	Hi	3.3	0.4	Hi
	9	7		9	2		9	6		4	1		8	1	
COED (n=53)	3.5	0.4	VH	3.5	0.4	VH	3.3	0.4	Hi	3.4	0.4	Hi	3.3	0.5	Hi
	2	0		8	2		9	7		5	6		2	0	
COENG (n=133)	3.5	0.4	VH	3.5	0.4	VH	3.2	0.4	Hi	3.3	0.4	Hi	3.2	0.4	Hi
	0	8		2	5		4	7		2	6		3	9	
CIT (n=28)	3.3	0.4	Hi	3.3	0.4	Hi	3.2	0.5	Hi	3.0	0.4	Hi	3.0	0.5	Hi
	5	6		9	1		8	3		9	5		8	4	
Sex															
Male (n=238)	3.4	0.4	Hi	3.4	0.4	Hi	3.2	0.4	Hi	3.3	0.4	Hi	3.2	0.4	Hi
	0	8		8	4		8	7		3	6		5	7	
Female (n=327)	3.4	0.4	Hi	3.5	0.4	VH	3.2	0.4	Hi	3.3	0.4	Hi	3.2	0.5	Hi
	7	5		4	1		2	8		7	6		4	0	
Paid Work Experience															
Without experience (n=456)	3.4	0.4	Hi	3.5	0.4	VH	3.2	0.4	Hi	3.3	0.4	Hi	3.2	0.4	Hi
	4	7		1	2		1	7		4	6		3	8	
With experience (n=109)	3.4	0.4	Hi	3.5	0.4	VH	3.3	0.4	Hi	3.4	0.4	Hi	3.3	0.5	Hi
	4	6		2	2		9	6		1	7		0	2	
As a Whole (n=565)	3.4	0.4	Hi	3.5	0.4	VH	3.2	0.4	Hi	3.3	0.4	Hi	3.2	0.4	Hi
	4	7		1	2		5	7		5	6		5	9	

Hi = High degree; VH = Very High degree

The analysis of variance was used to determine the significant difference in students' degree of engagement when grouped according to college. Results in Table 4.A shows that there was a significant difference in the degree of engagement [F (6, 558) = 5.089, p=0.000] and in the affective [F (6, 558) = 6.759, p=0.000], behavioral [F (6, 558) = 3.058, p=0.006], and cognitive [F (6, 558) = 3.275, p=0.004] engagements. Post hoc test revealed that COED students had significantly higher school engagement than CAMHS, CBA, COENG, and CIT students but did not significantly differ with that of CAS and CCJE students. This higher engagement among Education students demonstrates their significant degree of attention, curiosity, interest, optimism, and passion they display as they learn or being taught. The department's attentive

student supervision, quality teaching, and commendable curricular programs and activities may have contributed to students' school involvement.

Table 4.A. Difference in the Degree of Engagement of College Students When Grouped according to College

Area	College							F	Df	p
	CAS	CAMHS	CBA	CCJE	COED	COENG	CIT			
ENGAGEMENT	3.23 (0.26)	3.15 (0.27)	3.16 (0.27)	3.28 (0.28)	3.34 (0.29)	3.15 (0.29)	3.15 (0.27)	5.089	6, 558	0.000
Affective	3.47 (0.31)	3.30 (0.38)	3.31 (0.37)	3.56 (0.35)	3.53 (0.33)	3.37 (0.40)	3.27 (0.31)	6.759	6, 558	0.000
Behavioral	2.91 (0.33)	2.87 (0.33)	2.85 (0.31)	3.02 (0.30)	3.01 (0.36)	2.89 (0.35)	2.90 (0.26)	3.058	6, 558	0.006
Cognitive	3.38 (0.41)	3.30 (0.40)	3.35 (0.40)	3.32 (0.42)	3.52 (0.39)	3.24 (0.43)	3.30 (0.49)	3.275	6, 558	0.004

A t-test was used to determine the significant difference in college students' degrees of engagement when grouped according to sex, and paid work experience. Results in Table 4.B show that there is no significant difference in the degree of engagement [t (563) = 0.382, p=0.703] and in the affective [t (563) = 0.007, p=0.994], behavioral [t (563) = 1.301, p=0.194], and cognitive [t (563) = 1.726, p=0.085] dimensions when college students were grouped according to sex. Male and female students had similar reactions to teachers, other students, and the school; both found their lessons interesting and were content being at the university. Both sexes had similar degree of academic and co-curricular involvement. They were also similar in cognitively absorbing, and applying what they learned to real-world work. In contrast to a Malaysian study, Amir et al. [20] discovered a substantial difference in males and females' levels of affective and behavioral engagement; however, he found that male and female students' cognitive engagement is similar. In this study, the sample's affective, behavioral, and cognitive levels of school engagement show no significant gender interactions.

Furthermore, when college students were grouped according to paid work experience, there was no significant difference in the degree of overall engagement [t (563) = 1.567, p = 0.118], as well as affective [t (563) = 1.012, p = 0.312], behavioral [t (563) = 0.560, p = 0.576], and cognitive [t (563) = 1.788, p = 0.074] engagements. Paid work experience, as a variable, did not significantly separate those with and without experience. Working while studying did not influence much of the students' affective, behavioral, and cognitive engagement in school.

Table 4.B. Difference in the Degree of Engagement of College Students When Grouped according to Sex and Paid Work Experience

	Sex		t	df	p	Paid Work Experience		t	df	p
	Male	Female				Without	Without			
						Experien	Experien			
ENGAGEMENT	3.19	3.23	1.56	563	0.11	3.19	3.23	1.56	563	0.11
	(0.28)	(0.28)	7		8	(0.28)	(0.28)	7		8
Affective	3.39	3.43	1.01	563	0.31	3.39	3.43	1.01	563	0.31
	(0.37)	(0.36)	2		2	(0.37)	(0.36)	2		2
Behavioral	2.91	2.93	0.56	563	0.57	2.91	2.93	0.56	563	0.57
	(0.33)	(0.32)	0		6	(0.33)	(0.32)	0		6
Cognitive	3.31	3.39	1.78	563	0.07	3.31	3.39	1.78	563	0.07
	(0.42)	(0.40)	8		4	(0.42)	(0.40)	8		4

Note: the difference is significant when $p \leq 0.05$

Work readiness refers to attaining and demonstrating required competencies that broadly prepare college students for the job. It is the extent to which graduates are perceived to possess the attitudes and attributes that make them prepared or ready for success in the work environment [14]. An analysis of variance revealed that there was no significant difference in the overall degree of work readiness [$F(6, 558) = 1.276, p = 0.226$] and in the following soft skills: motivation [$F(6, 558) = 0.764, p = 0.598$], maturity [$F(6, 558) = 1.112, p = 0.508$], personal growth and development [$F(6, 558) = 1.259, p = 0.275$], attitudes to work [$F(6, 558) = 1.690$]. The findings showed that, generally, college students believed they were ready for the job. However, when work readiness was cascaded down into specific soft skills, some colleges seem to have significant differences. There was a significant difference in the following soft skills: technical focus [$F(6, 558) = 2.496, p = 0.022$] and adaptability [$F(6, 558) = 2.586, p = 0.018$]. A post hoc test revealed that CCJE students had a significantly higher technical focus than CAMHS, CBA, and COEN students.

Results show that CIT students were seemingly less adaptable than CBA, CCJE, and COED students. Adaptability means being flexible and accepting diversity [12]. CIT students seemed less adaptable than other students, possibly because the IT curriculum focuses more on programming, data analysis, and software development. This limited IT students' social interaction and ability to adapt to the university's social environment. On the other hand, CCJE students had significantly higher technical focus than CAMHS, CBA, and COEN students. Technical focus is the confidence in technical/theoretical knowledge coupled with initiative, personal structure, and task management [12]. CCJE students had higher technical focus probably due to their training that emphasizes discipline, initiative, and job management. Technical focus requires theoretical knowledge, initiative, personal structure, and task management. Moreover, the science streams correspond to the university's COE, CIT, and CAMHS degree programs. The study results did not confirm Beri and Jain's findings that science streams scored higher in personal growth and initiative as compared to arts and commerce undergraduate students [21]. The findings of this study show, however, that CJJE

course which is equivalent to Arts courses were more technically focused than science, technology and engineering courses.

Table 5.A. Difference in the Degree of Work Readiness of College Students when Grouped According to College

Area	College							F	df	p
	CAS	CAMHS	CBA	CCJE	COED	COENG	CIT			
WORK READINESS SKILLS	3.42 (0.32)	3.38 (0.30)	3.38 (0.33)	3.42 (0.34)	3.49 (0.33)	3.39 (0.34)	3.31 (0.35)	1.276	6, 605	0.266
Motivation	3.64 (0.39)	3.66 (0.38)	3.67 (1.07)	3.60 (0.43)	3.69 (0.38)	3.57 (0.49)	3.46 (0.50)	0.764	6, 605	0.598
Maturity	3.52 (0.39)	3.55 (0.39)	3.45 (0.41)	3.48 (0.44)	3.60 (0.41)	3.53 (0.42)	3.46 (0.41)	1.112	6, 605	0.354
Personal Growth/ Development	3.54 (0.43)	3.43 (0.43)	3.47 (0.44)	3.49 (0.43)	3.60 (0.40)	3.48 (0.45)	3.42 (0.46)	1.226	6, 605	0.291
Organizational Awareness	3.43 (0.44)	3.31 (0.41)	3.40 (0.40)	3.38 (0.44)	3.43 (0.49)	3.36 (0.43)	3.33 (0.51)	0.802	6, 605	0.569
Technical Focus	3.24 (0.50)	3.15 (0.44)	3.15 (0.49)	3.31 (0.47)	3.32 (0.45)	3.11 (0.50)	3.26 (0.45)	2.496	6, 605	0.022
Interpersonal Orientation	3.46 (0.44)	3.40 (0.50)	3.40 (0.47)	3.39 (0.47)	3.52 (0.40)	3.50 (0.48)	3.35 (0.46)	1.259	6, 605	0.275
Attitudes to Work	3.54 (0.41)	3.53 (0.43)	3.50 (0.40)	3.49 (0.42)	3.58 (0.42)	3.52 (0.45)	3.39 (0.41)	0.735	6, 605	0.621
Problem Solving	3.27 (0.49)	3.20 (0.44)	3.16 (0.48)	3.29 (0.46)	3.39 (0.47)	3.24 (0.47)	3.28 (0.53)	1.690	6, 605	0.121
Adaptability	3.33 (0.48)	3.35 (0.51)	3.37 (0.42)	3.44 (0.41)	3.45 (0.46)	3.32 (0.46)	3.09 (0.45)	2.586	6, 605	0.018
Resilience	3.24 (0.48)	3.25 (0.57)	3.20 (0.44)	3.38 (0.41)	3.32 (0.50)	3.23 (0.49)	3.08 (0.54)	1.743	6, 605	0.109

Note: the difference is significant when $p \leq 0.05$

A t-test was used to determine the significant difference in students' degree of work readiness when grouped according to sex, and paid work experience. It was also found out that there is no significant difference in the degree of overall work readiness [t(563)=0.106, p=0.269] and in the following soft skills: maturity [t(563)=0.593, p=0.553], personal growth/development [t(563)=0.719, p=0.473], technical focus [t(563)=0.084, p=0.933], interpersonal orientation [t(563)=1.645, p=0.101], attitudes to work [t(563)=1.474, p=0.141], adaptability [t(563)=0.857, p=0.392], and resilience [t(563)=0.172, p=0.863] when grouped according to sex. There was a significant difference, however, in the areas of motivation [t(563)=1.987, p=0.047], problem solving [t(563)=1.678, p=0.094], and organizational awareness [t(563)= 2.042, 0.042 p=0.047] when grouped according to sex. This suggests that, in terms of motivation, women were more committed, driven, persistent, and goal-oriented in job preparation than men. Likewise, women, had significantly higher organizational awareness, and thus, can understand organizational structures and culture than men. The Korn Ferry Hay Group report on 55,000 professionals in 90 countries confirms this result [22]. Women outperform men in emotional quotient, coaching and mentoring, influence, inspirational leadership, conflict management, organizational awareness, adaptability, teamwork, and achievement orientation. Anasuri and Anthony [23] found that gender affects young adults' resilience in Alabama and Tennessee. This study found a gender gap in motivation. Female students appear more motivated, committed, and persistent. Luzzo [24] compared college students' career maturity by gender and quantified qualifications, maturity, and career fit. In every career maturity metric, female students outperformed male students. Females had more personal growth initiatives, emotional self-efficacy, and general well-being than males. However, the findings show that men are better problem-solvers than women. This is consistent with the study by Loday and Drakpa [25] which found out that there is no statistically significant mean difference in employability soft skills between male and female students apart from problem-solving skills.

Table 5.B. Difference in the Degree of Work Readiness of College Students when Grouped According to Sex, and Paid Work Experience

Area	Sex		t	df	p	Paid Work Experience		t	df	p
	Male	Females				Without Experience	With Experience			
WORK READINESS SKILLS	3.38 (0.34)	3.41 (0.32)	1.106	563	0.269	3.39 (0.33)	3.44 (0.34)	1.445	563	0.149
Motivation	3.57 (0.45)	3.67 (0.71)	1.987	563	0.047	3.63 (0.65)	3.60 (0.46)	0.464	563	0.643
Maturity	3.50 (0.43)	3.52 (0.40)	0.593	563	0.553	3.52 (0.41)	3.50 (0.42)	0.490	563	0.624
Personal Growth/Development	3.47 (0.43)	3.50 (0.43)	0.719	563	0.473	3.48 (0.44)	3.52 (0.43)	0.790	563	0.430
Organizational Awareness	3.34 (0.45)	3.41 (0.42)	2.042	563	0.042	3.37 (0.42)	3.42 (0.47)	1.061	563	0.289
Technical Focus	3.19 (0.49)	3.20 (0.48)	0.084	563	0.933	3.17 (0.48)	3.31 (0.48)	2.730	563	0.007
	3.40	3.47	1.645	563	0.101	3.44	3.44	0.072	563	0.943

Interpersonal Orientation	(0.48)	(0.45)			(0.47)	(0.46)				
Attitudes to Work	3.48 (0.44)	3.54 (0.41)	1.474	563	0.141	3.51 (0.42)	3.52 (0.42)	0.186	563	0.852
Problem Solving	3.28 (0.47)	3.22 (0.48)	1.678	563	0.094	3.21 (0.47)	3.39 (0.46)	3.669	563	0.000
Adaptability	3.33 (0.46)	3.37 (0.46)	0.857	563	0.392	3.34 (0.46)	3.41 (0.47)	1.502	563	0.134
Resilience	3.25 (0.47)	3.24 (0.50)	0.172	563	0.863	3.23 (0.48)	3.30 (0.52)	1.332	563	0.184

Note: the difference is significant when $p \leq 0.05$

Correlational analysis in Table 6 revealed a significant relationship between engagement and work readiness [$r(563) = 0.61, p = 0.000$]. Student engagement have significant influence to work readiness according to Feriady and Yanto [26]. Work readiness or soft skills are assets that companies wish that graduates could develop during their studies [27]. Individuals with work readiness skills who are willing to change, create, and innovate are important assets for the organization in achieving economic growth, sustainable development, and intrapreneurship goals.

In the bigger picture, results showed a significant collective effect of engagement on work readiness. When predictors were examined individually multiple linear regression revealed that affective [$\beta = 0.145, t(563) = 4.615, p = 0.000$] and cognitive [$\beta = 0.174, t(563) = 5.541, p = 0.000$] engagements significantly predict work readiness but not behavioral engagement [$\beta = 0.043, t(1.384), p = 0.167$].

Engagement in learning and positive interactions with teachers, peers, and others are required for cognitive and affective engagement. With academics and friends, students feel good. Brunello and Schlotter [28] suggested that interpersonal and intrapersonal skills predict postsecondary enrollment, employment, and earnings. Interpersonal and intrapersonal skills that improve test performance may influence academic and career success tests.

Table 6. Engagement Predictors of Work Readiness of College Students

Coefficients	Beta	t	p
(Constant)		5.268	0.000
Affective	0.145	4.615	0.000
Behavioral	0.043	1.384	0.167
Cognitive	0.174	5.541	0.000

Note: the correlation is significant when $p \leq 0.05$

Overall, the research found a link between student engagement and job readiness. The more students pay attention, show curiosity, interest, optimism, and passion in college, the more they learn job-readiness skills that increase their employability. Students must be eager to learn, actively participate in their education, and have a positive school attitude to be confident in their work opportunities.

Engagement varied among college units but students' work readiness skills were similar. This means that each college is doing its best to offer excellent instruction, admirable teaching practices, and a conducive learning environment that develops students' work-readiness skills despite differences in their engagement activities.

Finally, the overall findings of the study confirmed Kolb's theory that through experiential learning, individuals create knowledge by transforming their lived experiences into existing cognitive frameworks [7]. The participants' high ratings concerning their school engagement and work readiness are a demonstration that their experiential learning in the university has continually transformed them from neophytes into work-ready graduates.

5. Conclusions

The findings suggest that college students' active participation in school is related to their readiness for work. Students' job readiness is measured by the quality and quantity of attention, curiosity, interest, optimism, and passion they invest in their studies, as well as the necessary work readiness skills they must develop and master. Despite the fact that the current study provides additional findings about student engagement and work readiness, it has limitations because it is confined only to a private university. The inclusion of other private higher education institutions as well as state universities and colleges could not have limited the results' generalizability and applicability.

Moreover, because of the intertwined relationship between student engagement and work readiness, school stakeholders must revisit the program of studies of various courses, student academic and non-academic activities, and "on the job trainings" to contextualize the curricula in order to meet the needs of students and industry. The university can provide experiential learning, a conducive academic environment, and effective pedagogy that reflect their vision, mission, goals, and objectives to ensure that graduates are gainfully employed and have better lives after graduation.

In addition, the study could be replicated at other private and public universities and colleges to produce conclusive results on student engagement and work readiness. Follow-up qualitative studies may be conducted to validate the findings.

References

- [1] J. BORG, M. TURNER, C. SCOTT-YOUNG: Fostering Student Work Readiness: A University Case Study. DOI:10.29007/n8wn (2017).
- [2] M. BOOTH: The Essential Employability Qualities Certification: Assuring Graduates Are Prepared for the 21st Century Workforce. Retrieved from https://evollution.com/revenue-streams/workforce_development/the-essential-employability-qualities-certification-assuring-graduates-are-prepared-for-the-21st-century-workforce/ (2018).
- [3] A. PECK, M. PRESTON: The Value of Engaged Students. Retrieved from <https://www.nacweb.org/career-readiness/competencies/the-value-of-engaged-students/> (2017).
- [4] M. F. IMPERIAL: Despite educated workforce, Filipinos lack 'soft skills' companies need—World Bank. Retrieved from <https://verafiles.org/articles/despite-educated-workforce-filipinos-lack-soft-skills-compan> (2017).
- [5] PHILIPPINE STATISTICS AUTHORITY (PSA): Retrieved from <http://www.psa.gov.ph/content/employment-rate-january-2018-estimated-947percent> (2018).
- [6] A. MISHKIND: College and Career Readiness and Success Center at American Institutes for Research. *ERIC Clearinghouse*, <https://books.google.com.ph/books?id=2aNKvwEACAAJ> (2014)
- [7] D. A. KOLB: *Experiential Learning: Experience as the Source of Learning and*

- Development. Englewood Cliffs, N. J.: Prentice-Hall (1984).
- [8] J. A. FREDRICKS, P. C. BLUMENFELD, A. H. PARIS: "School Engagement: Potential of the Concept, State of the Evidence," *Review of Educational Research*, vol. 74, no. 1. <https://doi.org/10.3102/00346543074001059> (2004).
- [9] S. L. CHRISTENSON, A. L. RESCHLY, J. J. APPLETON, S. BERMAN, D. SPANJERS, P. VARRO: Best Practices in Fostering Student Engagement. (Eds. A. Thomas, J. Grimes), Best practices in school psychology (5th ed.): National Association of School Psychologists. Bethesda, MD, 2008.
- [10] G. KEARSLEY, B. SHNEIDERMAN: Engagement Theory: A Framework for Technology-Based Teaching and Learning. *Educational Technology*, 38(5), 20-23, <https://www.jstor.org/stable/44428478> (1998).
- [11] R. DOE: Work readiness among graduate students. https://digitalcommons.lsu.edu/gradschool_dissertations/1008/etd-06222015-133755 (2015).
- [12] J. E. SALAZAR, W. A. SATTAR: Real-World Work Readiness of College Graduates in Bangladesh: The State of Practical Application of Theoretical Knowledge and Soft Skills ISBN: 978-984-34-0780-1 (2016).
- [13] S.F. LAM, S. JIMERSON, B.P. WONG, E. KIKAS, H. SHIN, F. H. VEIGA, ... J. ZOLLNERITSCH: Understanding and Measuring Student Engagement in school: The Results of an International Study from 12 countries. *School Psychology Quarterly*, 29(2), 213. DOI: 10.1037/spq0000057 (2014).
- [14] C. CABALLERO, A. WALKER: Work Readiness in Graduate Recruitment and Selection: A Review of Current Assessment Methods. *Journal of Teaching and Learning for Graduate Employability*. <https://doi.org/10.21153/jtlge2010vol1no1art546> (2010).
- [15] A.W. ASTIN: Student Involvement: A Developmental Theory for Higher Education. *Journal of College Student Development*, 40, 518-529 (1984).
- [16] P. HANDOKO, P. The role of organisational experience to support job readiness: A phenomenological approach of fresh graduates. *Technium Social Sciences Journal*, 20(1), 668–679 Retrieved from <https://techniumscience.com/index.php/socialsciences/article/view/3606> (2021).
- [17] A. MUSTIKAWANTO, A. G. ABDULLAH, B. HASAN: Effect of Competency, Work Motivation, Industrial Work Experience and Facilities on the Readiness of Work for Senior High School Graduates in Electro Expertise Programs. In *International Conference on Education, Science and Technology* (pp. 433-437). Redwhite Press. DOI: <https://doi.org/10.17509/invotec.v15i1.16045> (2019).
- [18] N. V. GUINTO, C. I. MAGALLANES: Work Motivation and Job Satisfaction of Employees of a Retail Company in Negros Island. *Philippine Social Science Journal*, 3(2), 119-120 (2020).
- [19] R.W. LENT, S.D. BROWN, G. HACKETT: Toward a unifying social cognitive theory of career and academic interest, choice, and performance. *Journal of Vocational Behavior*, 45(1), 79-122 (1994).
- [20] R. B. AMIR, A. SALEHA, Z. M. JELAS, A. R. AHMAD: Students' Engagement by Age and Gender: A Cross-Sectional Study in Malaysia. *Middle-East Journal of Scientific Research*, 1886-1892. doi: 10.5829/idosi.mejsr.2014.21.10.85168 (2014).
- [21] N. BERI, M. JAIN: Personal Growth Initiative among undergraduate students: Influence of emotional self-efficacy and general well-being. *Rupkatha Journal on*

- Interdisciplinary Studies in Humanities*. DOI:10.21659/rupkatha.v8n2.05 (2016).
- [22] K. FERRY: New research shows women are better at using soft skills crucial for effective leadership and superior business performance, finds Korn Ferry Hay Group [Press release]. Retrieved from <https://www.kornferry.com/press/new-research-shows-women-are-better-at-using-soft-skills-crucial-foreffective-leadership/> (2016, March 4).
- [23] S. ANASURI, K. ANTHONY: Resilience Levels Among College Students: A Comparative Study from Two Southern States in the USA. *Journal of Humanities and Social Sciences*. DOI: 10.9790/0837-2301035273. (2018).
- [24] D. A. LUZZO: Gender differences in college students' career maturity and perceived barriers in career development. *Journal of Counseling & Development*, 73(3), 319-322. <https://doi.org/10.1002/j.1556-6676.1995.tb01756.x> (1995).
- [25] S. LODAY, D. DRAKPA: A Study of Employability Soft Skills of Final-Year Students: A Case of Gedu College of Business Studies. *Technium Social Sciences Journal*, 26(1), 710–727. <https://doi.org/10.47577/tssj.v26i1.5143> (2021).
- [26] M. FERIADY, H. YANTO: Developing Students Work Readiness Model on Accounting Program of Vocational High School (VHS) Base on IEO Astin Model. *KnE Social Sciences*, 77-90. DOI:10.18502/KSS.V3I10.3120 (2018).
- [27] A. BADETS: Engineering curriculum development. In Socialization, soft skills and professional identity construction. 45thSEFI Conference (pp. 18-21) (2017, September).
- [28] G. BRUNELLO, M. SCHLOTTER: Non-cognitive skills and personality traits: Labour market relevance and their development in education and training systems (IZA Discussion Paper No. 5743). *Analytical Report for the European Commission prepared by the European Expert Network on Economics of Education*. (2011).