Psychological Capital and its Support to Students While They Combine Work and Study.

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Abstract

One in every two students in Aotearoa/New Zealand now works approximately 16 hours per week alongside studying, which is driven by the current increasing living costs and decreased access to governmental financial support seen in Aotearoa/New Zealand. This financial strain and need to self-support is a reality for students that requires more attention, due to the potential negative impacts of financial strain on students' stress, well-being and academic success, altering the students' time at university and academic outcomes.

However, there is variance in students' experiences and the way they balance these working and student roles, suggesting that individual psychological resources may play a significant role in shaping outcomes. The present study examined whether Psychological Capital (PsyCap), a positive psychological resource comprising hope, self-efficacy, resilience, and optimism (HERO), mediates the negative impacts of combining work and study by buffering the relationship between hours worked and student outcomes. An online survey was administered to 214 undergraduate students currently studying at the University of Waikato, Aotearoa, New Zealand. Data were analysed using correlation and mediation analyses to identify relationships between variables, and explain any relationship found between PsyCap involving the components of HERO and hours worked, stress, well-being and academic success.

The results showed that higher levels of PsyCap were associated with lower stress, along with higher levels of well-being and academic performance, giving an insight into the importance of psychological resources. Hours worked showed weak associations with student outcomes and were significantly related only to general university stress, indicating that employment hours can add stress but do not inherently impact a student's outcomes. Mediation analyses showed that PsyCap did not mediate the relationship between hours worked and student outcomes, primarily because hours worked were not significantly related

to PsyCap. These findings suggest that psychological resources may play a more substantial role in shaping a student's experience in the ability to juggle these roles, rather than employment intensity alone.

The findings highlighted the importance of internal coping resources, especially for students who are juggling multiple roles. Future research recommendations include interventions aimed at strengthening PsyCap, known as Psychological Capital Interventions (PCI), which focus on steps such as goal setting and identifying paths to reach these goals, providing a more practical and realistic approach to promoting student well-being, academic success and commitment to higher education. If these practical interventions are put in place to support students' academic success, this can positively impact the workforce and the new generation of workers.

Keywords: Psychological Capital, Positive Psychology, Psychological Resources, Student, Stress, Academic-Success

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Introduction

The continuously rising cost of living, reduced access to financial support, and increasing housing and tuition expenses have led one out of every two university students to resort to paid employment alongside their academic studies (Ministry of Education, 2021). This rise in living costs and lack of financial support may be a major source of stress and struggle for the majority of students, who would usually rather focus on their studies and future (Curtis & Shani, 2002; Robotham, 2012). In Aotearoa/ New Zealand (hereafter Aotearoa), the financial pressures that students face indicate a broader socioeconomic shift that has made it increasingly difficult for students to meet basic living costs without income support (e.g., government or parental support) (Murphy et al., 2018).

The 1992 removal of the bursary and grant system fundamentally changed the way of student life, shifting it from a system of supported full-time study to one of financial self-reliance (Crawford, 2016). This was a policy shift under the government that changed approximately 86% of students from having their tuition fees paid and receiving support for their living expenses to having student loans, meaning students can now borrow money from the government, but they will be required to pay it back (Crawford, 2016). Following these policy changes that shifted financial responsibility to individual students (Murphy et al., 2018), students are now expected to either financially support their own tuition or gain loans that can leave them in debt for years after completing their studies. Although this debt is often framed as “good debt”, it can be hard to see it that way for those in debt (Nissen et al., 2019). This debt is a major contributor to financial strain and stress, not only having the potential to impact students’ studies, but also increasing the risk of the development of physical and mental health concerns during their academic journey (Nissen et al., 2019).

The increasing pressure on students to find employment has broader implications beyond individual academic outcomes, as tertiary education plays a crucial role in preparing graduates for the professional workforce that is currently experiencing critical shortages (Watson & Howells, 2025). Although there are major workforce shortages in Aotearoa, mostly within the healthcare, social work, and educational sectors, as discussed by Watson & Howells (2025), there is an increasing strain and pressure on students that has the potential to increase dropout rates, perpetuating the continual lack of professionals in the workforce. Understanding factors that support students' capacity to balance work and study successfully is therefore not only a matter of importance for individual well-being, but also of national economic and social importance, particularly given the need to sustain the workforce supply in critical sectors (Watsib & Howells, 2025).

Paid employment alongside study has become a standard component of the modern university experience rather than an option for experience or learning, reflecting a necessity rather than a choice for many students (Ministry of Education, 2021). This shift suggests that it would be beneficial for universities to reconsider their student support strategies to better address the realities faced by working students. While employment can offer benefits such as financial stability and the development of transferable skills, it may also compete with the time, energy and cognitive resources required for academic engagement, potentially resulting in increased stress, fatigue, mental health concerns and diminished academic performance and engagement (Broadbridge & Swanson, 2005; Lisnyj et al., 2022).

To contextualise the impacts of stress on students, stress is further defined as a psychological and physiological response that comes when an individual perceives that an environmental demand exceeds their coping resources (Biggs et al., 2017). In tertiary educational contexts, stress has been linked to poorer mental health, poorer academic outcomes and has had an impact on dropout rates for students (Barbayannis et al., 2022).

Work and study stressors or conflicts refer to the tension that comes when the demands of employment interfere with students' ability to meet their academic requirements and responsibilities (Owen et al., 2017). This conflict may be a time conflict (e.g., reduced study time or increased work hours), a strain-based conflict (e.g., fatigue or emotional exhaustion), or a behaviour-based conflict (e.g., competing role expectations).

So far, research examining students in employment has provided inconsistent findings, with several studies reporting that more hours of work are associated with poorer academic outcomes, increased stress and a higher dropout rate of academic studies, especially when the hours exceed 20 hours per week (Creed et al., 2015; Darolia, 2013; Logan et al., 2016). Much of the early literature on student employment has adopted a deficit-based perspective, framing paid work primarily as a risk factor for academic underperformance and psychological strain (Riggert et al., 2006). Summer et al. (2023) identified four main negative impacts of working while studying, this includes limitation or time restraints on students' schedules, which can lead to a lack of control in emergencies (e.g., unexpected health issues), financial stressors, strain on social lives and negative effects on their mental health.

However, more recent research suggests that employment outcomes are varied and shaped by contextual and individual psychological resources rather than hours worked alone (Robotham, 2012). For example, research shows that working while studying can lead to several benefits, including improved time management, increased self-esteem, improved communication, employability, and work-readiness (Humphrey, 2006; Owen et al., 2017). There is research showing that students who work alongside study are more likely to engage in extracurricular activities that benefit their studies, such as participating in academic activities or studies, discussing that they are more likely to utilise the limited time they have and seek out valuable academic opportunities within this time (Zilvinskis & McCormick, 2019).

These mixed findings suggest that the relationship between employment and student success is not determined solely by the number of hours worked; rather, individual differences in students' psychological resources shaping how they experience and manage employment demands.

Theoretical Frameworks

Academic Success and Well-Being

Academic success and well-being are recognised as integral outcomes in higher education; these factors are particularly crucial for students who are balancing paid employment and study, due to employment having the potential to influence academic functioning and performance (Logan et al., 2016).

Academic success extends beyond objective success such as grade point average and includes students' perceived academic performance, engagement in studies, and the capacity and endurance to meet academic demands (DuPaul et al., 1991; Logan et al., 2016). Research consistently demonstrates that increased stress and competing role demands can undermine students' academic functioning, particularly when employment reduces available time and energy for study (Curtis & Shani, 2002; Broadbridge & Swanson, 2005).

Well-being reflects broader psychological functioning and encompasses positive mental health, emotional balance, and effective coping with daily challenges (Seligman, 2011; Tennant et al., 2007). Among university students, well-being is closely linked to academic engagement, persistence, and the overall adjustment to university life, with poorer well-being associated with elevated stress, burnout, illness, and reduced academic performance (Creed et al., 2015; Nissen et al., 2019).

Students who combine employment with study may face pressures that influence both their ability to function academically and their psychological well-being (Robotham, 2012; Schoffstall & Arendt, 2014). Although these outcomes are found to be examined separately,

considering them together can provide a more complete understanding of student adjustment. Academic performance alone does not fully reflect a student's experience or ability, as some students maintain desired grades while experiencing high levels of stress or lower well-being, and others may report positive well-being despite academically struggling. Examining both sides allows for a more comprehensive insight into how students are coping with the combined demands.

As previously discussed, findings in this area are varied, while some report negative associations between working hours and academic outcomes (Curtis & Shani, 2002; Humphrey, 2006), others suggest that the impact of employment is contingent on contextual and individual factors, including perceived stress and access to coping resources (Riggert et al., 2006; Creed et al., 2015). Within this study, academic success, stress and well-being are examined as key outcome variables influenced by employment demands, hours and PsyCap.

Stress

Stress has been identified as a key mechanism linking employment demands to academic and well-being outcomes. Stress itself has been widely identified as a threat to both the psychological and physical well-being of students (Riolli et al., 2012), and as linked to increased risk of burnout, illness, time off and poorer academic outcomes or lower grades (Houghton et al., 2011). Stress and coping frameworks emphasise that students' responses to demands or a situation may be more influential than the demands themselves, highlighting the importance of psychological resources for students in shaping outcomes (Biggs et al., 2017; Bedewy & Gabriel, 2015; Stallman & Hurst, 2016).

This study recognises that while working during study may introduce stressors that can place students at risk, individual psychological resources may play a critical role in supporting both academic functioning and overall well-being, which is why it is important to study the resources and factors that can support students for their future success.

Positive Psychology

Given the inconsistent outcomes reported by current research concerning the combination of work and study and student experiences, this study adopts a framework to help explain these inconsistencies. Recent research in positive psychology suggests that internal psychological resources play a crucial role in determining how students cope with multiple demands (Seligman, 2011). Positive psychology is a branch of psychology that focuses on strengths and traits that are supportive of individuals and communities thriving, emphasising well-being, happiness, resilience and human potential rather than emphasising mental illnesses or deficits (Gable & Haidt, 2005). Positive psychology was introduced to argue for a more balanced psychological science that examines not only what can go wrong in life, but also the personal and social resources that enable individuals and communities to thrive (Csikszentmihalyi, 1990; Seligman, 2011). The central premise is that fostering positive traits and mindsets can enhance performance, coping abilities and consequently increase one's quality of life (Csikszentmihalyi, 1990; Seligman, 2011). Rather than disregarding adversity and strains, positive psychology emphasises strengths that buffer the negative effects of stress and demanding life circumstances (Seligman, 2011). This branch of psychology and its perspective are relevant to the present study, as research suggests that students exposed to similar academic and employment demands experience varied outcomes dependent on coping capacities and available resources (Robotham, 2012).

Psychological Capital

One framework that may help explain the mixed results found in student outcomes and experiences is Psychological Capital (PsyCap). PsyCap is a personal resource able to be developed, comprising hope, efficacy, resilience and optimism, collectively known as HERO

(Luthans et al., 2007). PsyCap is defined by Newman et al. (2014) as a core positive psychology construct that provides a valuable framework to increase understanding of positive psychological functioning in demanding environments such as the workplace or university (Newman et al., 2014).

The four components of PsyCap, HERO, can work cooperatively to support people facing demands.

- Hope provides the motivation and pathways necessary to pursue academic and career goals simultaneously (Luthans et al., 2007). For working university students, hope is particularly important to maintain motivation when progress feels slow or strained due to time constraints or competing demands. Students high in hope may be more likely to identify other strategies for managing their workload or making adjustments because they have the hope of their future goals driving them (Sutton & Roemer, 2024).
- Self-efficacy is conceptualised as an individual's belief in their own abilities to take on a task and succeed, fostering confidence in managing both work and study responsibilities effectively and efficiently (Lupșa et al., 2020).
- Resilience helps students "bounce back" from setbacks, both academic struggles, personal life challenges and workplace challenges, and still move forward (Youssef & Luthans, 2007).
- Optimism helps maintain a positive outlook despite the difficulties of balancing multiple roles or responsibilities. Together, these psychological resources can help students not only survive but thrive in these demanding environments (Luthans & Youssef-Morgan, 2017).

Within organisational and educational contexts, higher PsyCap has been associated with better performance, greater well-being and lower stress levels, with research indicating

that PsyCap not only enhances students' ability to cope with the stress but also positively influences their academic success and overall well-being (Luthans & Youssef-Morgan, 2017; Avey et al., 2009). For example, past studies demonstrated that PsyCap serves as a buffer against student stress, mediating the relationship between stress and both psychological and physical well-being despite external pressures (Riolli et al., 2012; Siu et al., 2014). Baron et al. (2016) discussed that individuals with higher levels of PsyCap experienced lower stress even in high-demanding environments, suggesting that PsyCap may serve as a stress-buffering function for students balancing academic responsibilities alongside employment (Baron et al., 2016). PsyCap is perceived as state-like rather than trait-like; rather than being a fixed trait, such as individual personality, it is a malleable resource, open to development through targeted interventions (Luthans & Youssef-Morgan, 2017).

Research suggests that students' beliefs about their ability to manage demands have an important role in shaping stress-related outcomes, whilst environments that foster a belief in one's ability to complete academic or work-related tasks are likely to enhance students' chances of success (Biggs et al., 2017).

The protective role of PsyCap has been demonstrated across many challenging contexts and may be especially relevant in the current educational environment, where an increasing number of students are facing work-study conflicts. Avey et al. (2009) showed that employees with higher PsyCap showed greater job satisfaction and performance while having lower levels of stress. Siu et al. (2014) demonstrated that PsyCap predicted academic performance and life satisfaction among university students and served as a protective factor against mental health concerns such as depression and anxiety.

PsyCap is well-suited as a mediating role between stress, hours worked and academic success, as it represents a set of psychological resources that are influenced by contextual demands, shaping behavioural responses and emotional outcomes. Employment demands

may impact or challenge students' personal psychological resources, such that students with a higher PsyCap may be able to logically understand stressors, maintain motivation and regulate their emotional responses. Examining PsyCap as a mediator, therefore, provides a clearer understanding of how employment can influence student outcomes, beyond its direct effects alone.

The relevance of PsyCap is especially important in the tertiary education context, where 70% of students engage in employment while studying (Murphy et al., 2018). Rising living costs and workforce shortages previously discussed further intensify these pressures, which make employment a necessity for many students rather than a choice for professional development. These current expectations raise concerns that employment demands may take away from study time and impact academic achievement, a concern that has previously been raised within the Aotearoa national education policy (Summer et al., 2023; Ministry of Education, 2021).

Research has also shown that employment during study is not always detrimental; it can enhance skill development and social capital and support professional identity formation, suggesting it can be an important aspect of development under certain conditions and with the right resources to combat the stressors (Robotham, 2012). From a positive psychology perspective, experiences in a workplace may also contribute to the development and enhancement of psychological resources such as PsyCap. There is a balance that needs to be met to ensure that the prolonged exposure of high demands without the right coping resources is not then a detriment to a student's mental health or stress levels (Creed et al., 2015).

PsyCap has been shown to buffer the negative effects of high demands in the workplace and academic setting, and support goal motivation, confidence in managing multiple roles, recovery from setbacks, and maintenance of a positive outlook in the face of competitive demands (Luthans et al., 2014). Recent work by Sutton and Roemer (2024)

highlighted the importance of goal-directed motivation and flexible pathway thinking (the ability to adapt or create new strategies to achieve a goal) in academic contexts, suggesting that students who can adapt their goals and strategies when progress is disrupted are better able to persist under competing demands, such as this study of paid employment (Sutton & Roemer, 2024).

Although there is growing evidence of the benefits of PsyCap, limited research has examined its role among university students who work and study at the same time. Much of the existing literature focuses separately on academic and workplace stress, with less attention to those who are experiencing both simultaneously.

Similarly, few studies have empirically tested whether PsyCap explains the relationship between employment demands and student outcomes such as academic success, perceived stress and well-being.

Because previous research shows a link between students' PsyCap and academic success in terms of grade outcomes, the questions here are: what is the impact of hours worked on students' work-study balance, how does this impact their well-being and academic success, and what role does PsyCap play in mediating these effects? When discussing mediation, this refers to the link or relationship; it explains how or why a variable influences an outcome (Hayes, 2013). Mediation is an important tool chosen for this study to provide a deeper insight into relationships and to help gain a clearer picture of them (Hayes, 2013). As discussed, there is extensive research on combining work and study, but there is a lack of research into why some students continue and persist with the combination and heavy work commitments, while others cannot (Hovdhaugen, 2015). This shows the importance of examining mediating factors such as PsyCap, which may explain these individual differences in perseverance.

This study aims to address this research gap by examining whether PsyCap mediates the relationship between hours worked and student outcomes, including academic success, perceived academic stress, general university stress, and well-being among undergraduate students at Waikato University in Aotearoa. PsyCap was chosen as a mediator because of its theoretical relevance for understanding how individuals cope with competing demands (Luthans et al., 2007).

By applying a PsyCap framework, this study aims to inform the development of evidence-based student support strategies. Given the increasing number of students engaging in paid employment while studying, investigating this topic is an essential step towards improving institutional support systems and understanding how the system is set up. Understanding the impact of PsyCap on students' ability to thrive may also encourage advocacy for enhanced student support and inform future higher education policy.

Based on the above research, the present study proposes the following hypotheses.

- *H1: Greater hours of employment will be associated with higher levels of stress.*
- *H2: Higher PsyCap will be associated with better academic success and well-being.*
- H3*: Psychological Capital will mediate the relationship between hours of employment and student outcomes (academic success and well-being), such that higher PsyCap will reduce the negative effects of employment hours on stress.*

Method

Participants

A total of 238 responses were collected through an online survey from the University of Waikato's School of Psychology Introduction to Psychology Research Program (IPRP). After data screening and cleaning procedures (described below), 214 responses remained for analysis.

The data showed that participants worked an average of 16.66 hours per week. Approximately 7% of participants reported working full-time, while the majority worked part-time. Most students (73%) reported not receiving a student allowance, while 27% reported that they are receiving a student allowance. The participants were predominantly female (88%), while 11% identified as male, and one student preferred to self-describe. 65% of the participants identified as NZ European, 12% identified as Māori, the rest of the sample identifies Pacifika Peoples (3%), Asian (10%), Middle Eastern/Latin American/African (3%) and "Other" (7%).

Measures

Hours worked: Participants reported the total number of hours they worked per week alongside their studies.

Academic Performance Scale (APS). The APS measured participants perceived academic performance on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), with higher scores indicating better perceived performance (DuPaul et al., 1991). APS has strong internal consistency ($\alpha = .89$).

Perceptions of Academic Stress Scale (PASS). Academic stress was measured using the 18-item PASS scale, which measures three factors: academic expectations, perceptions of

workload and examinations, and self-perceptions. Items were rated on a Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree), with higher scores indicating a greater perceived academic stress (Bedewy & Gabriel, 2015). Items 1, 2, 3, 4, and 5 are reverse-coded. The PASS demonstrates good internal consistency (Cronbach $\alpha = .86$).

University Stress Scale (USS). The USS measured general stress associated with university life on a 4-point Likert scale ranging from 1 (not at all) to 4 (consistently), with higher scores indicating greater perceived stress (Stallman & Hurst, 2016). The USS demonstrates good internal consistency ($\alpha = .83$).

Well-Being Scale (WEMWBS). Student well-being was measured using the Warwick Edinburgh Mental Well-Being Scale (WEMWBS) on a 5-point Likert scale ranging from 1 (none of the time) to 5 (all of the time), which assesses positive mental health and psychological functioning. The WEMWBS has high internal consistency ($\alpha = .89$) (Tennant et al., 2007).

Psychological Capital (PsyCap). PsyCap was measured using the Psychological Capital Questionnaire (PCQ), which contains four components: hope, self-efficacy, resilience and optimism (Luthans et al., 2007). The PCP scale has a high internal consistency ($\alpha = 0.886$). PCQ was measured on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), higher scores show greater levels of psychological capital. Items 13, 20 and 23 are reverse-coded.

Procedure

Ethical approval was obtained from the University of Waikato Human Research Ethics Committee before data collection commenced.

Data were collected via an online survey on Qualtrics XM, which was then distributed to students at Waikato University through IPRP, a research tool for universities to distribute studies. Participants were recruited voluntarily and anonymously and had the right to

withdraw at any time; the only criterion for participation was engagement in employment alongside their studies. After signing the informed consent, participants completed demographic questions. The survey took approximately 15-20 minutes to complete.

All analyses were run using IBM SPSS Statistics (Version 30). Descriptive statistics were calculated for all study variables. Pearson's correlation analyses were conducted to examine bivariate relationships between hours worked, psychological capital, stress, well-being and academic stress and outcomes. Mediation analyses were performed using PROCESS Model 4 (Hayes, 2022) to test whether PsyCap mediated the relationships between hours worked, well-being and stress. Indirect effects were estimated using bias-correcting bootstrapping with 5,000 resamples and 95% confidence intervals.

Data Screening

Data screening followed recommended procedures for online survey research (Meade & Craig, 2012) to ensure the validity and reliability of the findings of the self-report online survey data. Eight trial or preview responses were removed prior to running analyses. Six responses with fewer than 95% survey completion were removed. Response duration was examined to identify rapid responding; participants who completed the survey in less than 50% of the median completion time were excluded from the dataset (Greszki et al., 2014), resulting in the removal of eight responses. Multivariate outliers were identified using Mahalanobis distance with a $p < .001$ criterion (Maesschalck et al., 2000), resulting in the removal of two responses. No missing data were present in the final dataset. After the data cleaning, the sample that remained was 214 participants to complete the analyses.

Results

Descriptive Statistics

Descriptive statistics for all study variables, including means, standard deviations, skewness and kurtosis are presented in Table 1. Mean levels of perceived academic stress

(PASS; *M* = 27.38, *SD* = 4.94) and university student stress (USS; *M* = 41.34, *SD* = 8.42) indicated moderate stress levels across the sample. Students reported moderate to high levels of academic performance (APS; *M* = 44.54, *SD* = 8.86) and well-being (*M* = 2.89, *SD* = 0.59).

Psychological capital subscales showed relatively high mean scores, including hope (*M* = 21.43, *SD* = 3.67), self-efficacy (*M* = 20.66, *SD* = 4.19), resilience (*M* = 22.85, *SD* = 3.33), and optimism (*M* = 20.29, *SD* = 3.49).

All variables showed acceptable levels of skewness and kurtosis, with values being within the recommended thresholds (+1).

Table 1:

Descriptive Statistics for Study Variables (N = 214)

Variable	M	SD	Skewness	Kurtosis
APS	27.38	4.94	0.04	-0.12
USS	41.34	8.42	0.66	0.67
WB	44.54	8.86	0.49	0.66
PASS	2.89	0.59	-0.52	0.26
Hope	21.43	3.67	-0.22	-0.05
Self-Efficacy	20.66	4.19	-0.21	-0.25
Resilience	22.85	3.33	-0.26	0.01
Optimism	20.29	3.49	-0.13	0.50

Note: APS = Academic Performance Scale; USS = University Student Stress; WB = Well-being; PASS = Perceptions of Academic Stress Scale; PCQ (Hope, Self-Efficacy, Resilience & Optimism) = Psychological Capital Questionnaire.

Correlation Analyses

Pearson's correlation analyses were conducted to examine relationships between hours worked, stress, well-being, academic performance, PsyCap, and its components (hope, self-efficacy, resilience and optimism) as shown in Table 2.

Hypothesis 2 was supported as academic performance was positively correlated with well-being ($r = .43$, $p < .001$) and all PsyCap components, hope ($r = .33$, $p < .001$), self-efficacy ($r = .42$, $p < .001$), resilience ($r = .25$, $p < .01$), and optimism ($r = .35$, $p < .001$).

University stress was positively correlated with perceptions of academic stress ($r = .49$, $p < .001$). University stress was also negatively associated with well-being ($r = -.46$, $p < .001$) and with the PsyCap components of hope ($r = -.26$, $p < .001$) and optimism ($r = -.26$, $p < .001$).

PASS demonstrated negative associations with well-being ($r = -.49$, $p < .001$) and with academic performance ($r = -.38$, $p < .001$). PASS was also negatively correlated with all PsyCap components, hope ($r = -.40$, $p < .001$), self-efficacy ($r = -.29$, $p < .001$), resilience ($r = -.22$, $p < .001$), and optimism ($r = -.34$, $p < .001$).

Well-being was positively associated with all PsyCap components, which also supports hypothesis 2, hope ($r = .43$, $p < .001$), self-efficacy ($r = .35$, $p < .001$), resilience ($r = .34$, $p < .001$), and optimism ($r = .51$, $p < .001$).

Table 2

Correlations among academic performance, stress, well-being, and psychological capital (N = 214)

Variable	1	2	3	4	5	6	7	8
1. APS	—							
2. USS	-.086	—						
3. PASS	-.379**	.494**	—					

4. WB	.427**	-.455**	-.488**	—			
5. Hope	.333**	-.262**	-.399**	.426**	—		
6. Self-Efficacy	.418**	-.065	-.294**	.345**	.543**	—	
7. Resilience	.251**	-.104	-.222**	.339**	.596**	.447**	—
8. Optimism	.347**	-.264**	-.340**	.512**	.597**	.484**	.559** —

*Note. *p < .05, *p < .01 (2-tailed).*

Mediation Analyses

Mediation regressions were conducted to test hypotheses 1 and 3. Hours worked were entered as the predicting variable, well-being entered as the outcome variable, with PsyCap entered as the mediating variable. These analyses examined whether PsyCap mediated the relationships between hours worked, well-being and stress.

Well-being. Hours did not significantly predict PsyCap (β = 0.035, *p* = .683), whereas PsyCap significantly predicted well-being (β = 0.376, *p* <.001). The indirect effect of hours worked on well-being through PsyCap was not significant (effect = 0.013, 95% CI [-0.047, 0.075]), and the direct effect of hours worked on well-being was also non-significant (β = -0.104, *p* = .062).

Perceived Academic Stress. Hours worked did not significantly predict PsyCap (β = -0.020, *p* = .683). PsyCap significantly predicted perceived academic stress, with higher PsyCap associated with lower stress (β = -0.155, *p* = .001). The indirect effect of hours worked on stress through PsyCap was not significant (effect = -0.001, 95% CI [-0.004, 0.002]), and the direct effect of hours on perceived academic stress was not significant (β = 0.001, *p* = .746).

University Student Stress. Hours significantly predicted university student stress, which supports hypothesis 1 (β = 0.127, *p* = .032), and PsyCap significantly predicted stress

when controlling for hours (β = -0.155, p = .001). The indirect effect of hours on stress via PsyCap was not significant (effect = -0.005, 95% CI [-0.039, 0.018]), which did not support hypothesis 3.

Summary of Findings

In summary, the mediation analysis supported hypothesis 1, that greater hours of employment was associated with higher stress, but did not fully support hypothesis 3: that PsyCap will mediate the relationship between hours of employment and student outcomes, such as reducing the negative effects of employment hours on stress. This may be due to hours not inherently coming out as a determinant of student outcomes, with only a weak association with stress. The findings indicated that PsyCap was consistently associated with better student outcomes, whereas hours worked showed limited direct associations with academic and well-being variables. This could also be because this study's dataset reported a mean of 16 hours of work per week, and previous studies have discussed that working hours higher than 20 hours can be harmful to a student's outcomes (Summer et al., 2023).

Mediation analyses further indicated that PsyCap did not mediate the relationship between hours worked and student outcomes. Although PsyCap significantly predicted well-being and stress outcomes, hours worked did not significantly predict PsyCap, resulting in non-significant indirect effects across all models. A small but significant direct relationship was observed between hours worked and university student stress, indicating that students working longer hours experienced slightly higher general stress levels, independent of PsyCap.

Together, these findings suggest that while employment hours contribute to general university stress, PsyCap plays a more substantial role in shaping students' academic and psychological experiences. The results highlight PsyCap as a key correlate of student well-being and academic functioning, independent of employment demands.

Discussion

This study examined the relationships between employment, PsyCap, stress, well-being and academic performance for students. Students play an important role in the future workforce, yet due to the socioeconomic shift, students are currently facing financial pressures that have the potential to cause stress, have an impact on well-being and academic outcomes (Murphy et al., 2018).

An outcome of the mediation analyses showed that PsyCap was a significant predictor of stress and well-being outcomes, however, it did not mediate the relationship between hours worked, stress and well-being, which did not support hypothesis 3. Hours worked demonstrated only a weak association with stress. This suggests that while PsyCap plays an important protective role for students' well-being and stress, the number of hours worked does not significantly influence these outcomes through PsyCap, indicating that other factors may impact how students cope with stress (Avey et al., 2009; Luthans & Youssef-Morgan, 2017).

Overall, the findings in this study highlight the importance of internal psychological resources in shaping student experiences and their ability to thrive while they balance work and study. Results highlight PsyCap as a key factor associated with more positive and desirable student outcomes, while hours worked showed relatively weak relationships with stress, well-being and academic performance did not provide a consistent relationship with these outcomes. This finding could link back to research discussed by Zilvinskis & McCormick (2019), who found that students who work alongside study can often utilise what little time they have, and commit the hours available to educational activities, continuing to build their resources.

Consistent with prior research, higher PsyCap was associated with lower levels of both university stress and perceived academic stress, as well as higher levels of well-being

and academic performance, indicating that hope, self-efficacy, resilience and optimism act as protective resources for students facing both academic and work demands (Li et al., 2023; Siu et al., 2014; Youssef & Luthans, 2007). Students with greater PsyCap appear better equipped to manage academic pressures and competing responsibilities, supporting evidence that PsyCap functions as a protective psychological resource across educational and occupational contexts (Luthans et al., 2007; Newman et al., 2014).

This research suggests that students with greater hope for their future, resilience, self-efficacy and optimism, may be more equipped to manage academic demands and competing responsibilities, giving them a better chance at coping with the pressures of juggling roles whilst still being able to thrive and push for their goals. This interpretation aligns with Sutton and Roemer's (2024) work, which emphasises that students' goal-oriented motivation and perceived capacity to generate alternative pathways play a critical role in sustaining engagement and coping when academic progress is disrupted by competing demands.

Stress itself emerged as having an influence on student outcomes. The positive associations between university stress and perceived academic stress, alongside their negative relationships with well-being and academic performance, indicate that stress may play a more immediate role in shaping student functioning and coping than employment itself (Bedewy & Gabriel, 2015; Stallman & Hurst, 2016). This suggests that how students experience and manage stress may be a more important factor than the number of hours they work, supporting stress and coping frameworks which emphasise the importance of perceived strain rather than objective demands in predicting outcomes (Biggs et al., 2017). Students with higher PsyCap may therefore experience better outcomes because they are better able to regulate stress responses, maintain motivation, and sustain engagement with their academic work and employment (Houghton et al., 2011; Youssef & Luthans, 2007).

Contrary to expectations and prior research suggesting that work hours negatively impact academic outcomes (Curtis & Shani, 2002; Humphrey, 2006), hours worked per week in the present study demonstrated only weak associations with stress, well-being and academic performance and were not significantly related to PsyCap. This finding suggests that employment in itself may not be inherently detrimental to students' well-being or academic performance, challenging the deficit-based assumptions that working students are inherently at risk of poorer outcomes and instead highlighting students' capacity to adapt to employment demands when sufficient psychological resources are present (Riggert et al., 2006; Robotham, 2012). Instead, the impact of work may depend on unmeasured or contextual factors such as job flexibility or support, perceived control, financial necessity or work-study balance (Broadbridge & Swanson, 2005; Creed et al., 2015; Summer et al., 2023). These results align with prior research indicating that lower hours of employment alongside study can be manageable for students when adequate coping resources are present and available for them (Riggert et al., 2006).

Mediation analyses showed that PsyCap did not mediate the relationship between hours worked and student outcomes. This could primarily be due to the absence of an association between hours worked and PsyCap, however, it is important to note that the absence of a mediation effect suggests that PsyCap does not operate as a pathway through which employment comes, but rather functions as a parallel and strong psychological resource that independently supports student adjustment, regardless of work intensity or pressure. This may help explain why work hours were insufficient to influence PsyCap in the present study (Luthans & Youssef-Morgan, 2017). The strong association between both PsyCap and stress and PsyCap and well-being highlight the importance of strong psychological resources as an indicator of student adjustment to stress and in support of their well-being (Luthans et al., 2007; Li et al., 2023). Together, these findings suggest that, while

employment demands, or the need for employment, may be difficult to change for many students, particularly in the current cost-of-living context, strengthening internal psychological resources, such as PsyCap, may represent a more realistic and impactful target for student support interventions.

Theoretical Implications

The present findings contribute to the literature on student employment and psychological resources by refining theoretical understandings of how employment demands relate to student outcomes. Contrary to deficit-based models that view paid employment as detrimental, the results suggest that hours worked per week are only weakly associated with student stress and are not directly linked to academic performance or well-being.

This supports contemporary stress and coping frameworks, which emphasise that individuals' appraisals of demands and available coping resources are more predictive of outcomes than objective stressors alone (Biggs et al., 2017). In the context of this study, PsyCap emerged as a robust and independent predictor of student stress and well-being, reinforcing its conceptualisation as a core personal resource within positive psychology (Luthans et al., 2007).

Importantly, the absence of a mediation effect indicates that PsyCap does not function as a pathway through which employment hours influence student outcomes, but rather it operates in parallel, as a stable psychological resource that supports adjustment regardless of work intensity. This finding builds on existing PsyCap theory by suggesting that, although PsyCap is conceptualised as state-like and malleable, it may be less affected by external demands such as weekly work hours and instead reflects accumulated coping experiences and support developed over time that students can draw on to meet these demands (Luthans & Youssef-Morgan, 2017). These findings emphasise the need for theoretical models of student work-study balance to move beyond linear, demand-based explanations and incorporate an

adapted model, including the role of enduring psychological resources that shape how demands are experienced and managed.

Practical Implications

The present findings have important practical implications for universities, policy makers, and student support services. Given that many students engage in paid employment out of financial necessity rather than choice, particularly amid rising living costs, reducing employment hours may not be a feasible or logical intervention to improve student outcomes. Instead, the strong and consistent associations between PsyCap, stress, and well-being suggest that interventions aimed at strengthening students' internal psychological resources may represent a more effective and realistic approach to supporting student success.

PCI has demonstrated effectiveness in improving performance and reducing stress in both educational and workplace settings (Luthans et al., 2006; Luthans et al., 2014). Implementing PsyCap-based programmes within universities, such as workshops, embedded in curriculum components, or student support initiatives, which may help students better manage academic pressures and competing work demands before stress becomes overwhelming. Beyond individual benefits, these interventions may have a broader societal and economic value. By supporting student retention, degree completion and successful transitions into the workforce, particularly in sectors experiencing critical shortages, PsyCap-focused initiatives may contribute to longer-term workforce sustainability and reduced public costs associated with student attrition and mental health strain (Luthans et al., 2006; Watson & Howells, 2025).

Overall, these findings have practical implications for supporting students who combine work and study, and highlight the importance of psychological resources while juggling these roles. Given that most students are working for financial reasons and may not have the option or privilege to reduce their hours or quit their jobs while they are studying,

interventions aimed at strengthening PsyCap may offer the best alternative approach to supporting student well-being and academic success (Luthans et al., 2006; Luthans et al., 2014).

These studies are particularly relevant in Aotearoa, where rising living costs have intensified financial strain for students, reinforcing the need for interventions that strengthen internal coping resources rather than relying solely on changes in employment behaviour alone. Interventions aimed at enhancing PsyCap may offer a valuable avenue for reducing stress and promoting well-being and academic success, particularly for students who are unable to reduce their work commitments. These interventions could include implementing the Psychological Capital Intervention (PCI), which targets hope, efficacy, resilience, and optimism and has shown promise for building each resource of HERO (Luthans et al., 2006; Lupșa et al., 2020). Such interventions could be implemented through workshops or coaching, or integrated into the curriculum, to help students build resilience and coping skills before they encounter major academic or work stressors (Luthans et al., 2014).

PCI has also been shown to produce noticeable economic benefits, with Luthans et al. (2006) discussing their potential ‘dollar impact’ through improved performance and reduced stress, suggesting that interventions may ultimately benefit the government and societal outcomes by improving student retention, degree completion and the transition of graduates into the critical workforce sectors in Aotearoa (Luthans et al., 2006). Within the context of the current cost-of-living crisis, which has led students to work more hours to afford basic human needs, PCI may represent a particularly relevant and realistic PsyCap-based intervention by supporting students' well-being and persistence without requiring reductions in work hours.

Limitations and Future Research

A limitation for this study would include the self-reporting survey, due to the common method bias, answers can fluctuate or be influenced based on the participant's current mood, or answering in a socially acceptable or socially-desirable way rather than the accurate answer (Podsakoff et al., 2003). A longitudinal study could be beneficial to gather an accurate dataset with a strong baseline of realistic answers.

Secondly, it would be beneficial for future research to also build on the present findings with a longitudinal study, as it would allow for the examination of changes in PsyCap, stress, and well-being over time, helping clarify the direction of these relationships. Such designs could help determine whether the increase of psychological resources lead to reductions in stress or whether lower stress facilitates the development of psychological resources. Conducting this research through a student's experience throughout undergraduate studies through to postgraduate studies would also give important insight into how prolonged experiences within an educational context may impact stress and academic outcomes.

Building on the discussion above, it would also be beneficial to further this study, and retest hypothesis 3, via having a larger data set, testing students who work over the average of 20 hours per week, to further test the relationship between hours, PsyCap and student outcomes (Summer et al., 2023)

Future research could also explore contextual and cultural factors that may shape students' psychological capital and their adaptation to pressure, for an example examining diverse student populations, demographics, different socioeconomic demographics and institutional contexts may help explain whether the protective effects of PsyCap generalise across settings or backgrounds, including within the unique social and cultural context of Aotearoa.

For the student population of Aotearoa, another beneficial factor to analyse in future research is Te Whare Tapa Wha, a well-being model that encapsulates four areas of holistic well-being developed by Sir Mason Durie (1984). The four walls of Te Whare Tapa Wha are Family (whānau), physical (tinana), mental (hinengaro) and spiritual (wairua) (Rochford, 2004). In in the context of Aotearoa and the multicultural, diverse population, a cultural framework would be important to study alongside international models. This could be important to consider in research, to investigate if this well-being model supports or plays a role in building and establishing the components of PsyCap and in the development of strong resources if the four elements of holistic well-being are strong and supported.

Conclusion

The results of the present study add a valuable contribution to support the understanding of the protective factors that support students to thrive not only within their academic and workplace journey but holistically (academic, well-being and mental health). Although not all hypotheses were supported, that has given a valuable insight to what still needs to be researched in consideration to students supports.

Psychological Capital, containing hope, optimism, self-efficacy and resilience, has come forth as an important protective factor, and it is the hope that research will continue to investigate pathways to better support students in their journeys. Students play an important role in the future society, and it is not only reliant on their own hard work, but it is also crucial that governments and educational sectors are continuously seeking to find the best ways to support students and future professionals within this ever-changing society.

It would be important for future research to consider replicating this research through longitudinal methods to investigate the ever-changing psychological resources and the best point to include Psychological Capital Interventions in the academic journey. If interventions to strengthen PsyCap are able to be implemented within the educational system of Aotearoa,

this could positively support the students within the current system and therefore, lead on to influence the workforce.

References

Avey, J. B., Luthans, F., & Jensen, S. M. (2009). Psychological Capital: A positive resource for combating employee stress and turnover. *Human Resources Management*, *48*(5), 675-846. https://doi.org/10.1002/hrm.20294

Barbayannis, G., Bandari, M., Zheng, X., Baquerizo, H., Pecor, K. W., & Ming, X. (2022). Academic stress and mental well-being in college students: correlations, affected groups and COVID-19. *Frontiers in Psychology*. https://DOI:10.3389/fpsyg.2022.886344

Baron, R. A., Franklin, R. J., & Hmieleski, K. M. (2016). Why Entrepreneurs Often Experience Low, Not High, Levels of Stress: The Joint Effects of Selection and Psychological Capital. *Journal of Management*, *42*(3), 742-765. https://DOI:10.1177/0149206313495411

Bedewy, D., & Gabriel, A. (2015). Examining perceptions of academic stress and its sources among university students: the perception of academic stress scale. *Health Psychology Open*, 1-9. https://DOI:10.1177/2055102915596714

Biggs, A., Brough, P., & Drummond, S. (2017). Lazarus and Folkman's Psychological Stress and Coping Theory. In C. Cooper & J. C. Quick (Eds.), *The Handbook of Stress and Health: A Guide to Research and Practice* (First Edition ed., pp. 349-364). Wiley. https://doi.org/10.1002/9781118993811.ch21

Broadbridge, A., & Swanson, V. (2005). Earning and learning: how term-time employment impacts on students' adjustment to university life. *Journal of Education and Work*, *12*(2), 235-249. https://DOI:10.1080/13639080500086008

Crawford, R. (2016). *History of tertiary education reforms in New Zealand* [New Zealand productivity commission research note 2016/1]. The Treasury. https://www.treasury.govt.nz/sites/default/files/2017-11/history-tertiary-education-reforms.pdf

Creed, P. A., French, J., & Hood, M. (2015). Working while studying at university: The relationship between work benefits and demands and engagement and well-being. *Journal of Vocational Behavior*, *86*, 48-57. https://doi.10.1016/j.jvb.2014.11.002

Csikszentmihalyi, M. (1990). *Flow: The Psychology of Optimal Experience*. Harper & Row. https://www.researchgate.net/publication/224927532

Curtis, S., & Shani, N. (2002). The effects of taking paid employment during term-time on students' academic studies. *Journal of Further and Higher Education*, *26*(2), 129-138. https://doi.org/10.1080/03098770220129406

Darolia, R. (2013, October 31). Working (and studying) Day and Night: Heterogeneous effects of Working on the Academic Performance of Full-Time and Part-Time Students. *Economics of Education Review*, *38*, 38-50.

DuPaul, G. J., Rapport, M. D., & Perriello, L. M. (1991). Academic performance rating scale. *School Psychology Review*, *20*(2), 284-300. https://www.researchgate.net/publication/258129184_Academic_Performance_Rating_Scale#:~:text=This%20instrument,in%20students%20with%20disruptive%20behavior

Gable, S. L., & Haidt, J. (2005). What (and Why) is Positive Psychology. *General Psychology*, *9*(2). https://doi.org/10.1037/1089-2680.9.2.103

Greszki, R., Meyer, M., & Schoen, H. (2015). Exploring the effects of removing "too fast" responses and respondents from web surveys. *Public Opinion Quarterly*, *79*(2), 471-503. https://doi.org/10.1093/poq/nfu058

Hayes, A. F. (2013). Introduction to mediation, moderation, and conditional process analysis: A regression-based approach. *The Guilford Press*.

Houghton, J. D., Wu, J., Godwin, J. L., Neck, C. P., & Manz, C. C. (2011). Effective stress management: a model of emotional intelligence, self-leadership, and student stress coping.

Journal of Management Education, *220*(36), 220-233. https://DOI:10.1177/1052562911430205

Hovdhaugen, E. (2015). Working while studying: the impact of term-time employment on dropout rates. *Journal of Education and Work*, *28*(6), 631-651. https://doi.10.1080/13639080.2013.869311

Humphrey, R. (2006, June 22). Pulling Structured Inequality into Higher Education: the Impact of Part-Time Working on English University Students. *Higher Education Quarterly*, *60*(3), 270-286. https://doi.10.1111/j.1468-2273.2006.00317.x

Li, R., Hassan, N. C., & Saharuddin, N. (2023). Psychological Capital Related to Academic Outcomes Among University Students: A Systematic Literature Review. *Psychology research and behavior management*, *16*, 3739-3763. https://doi:10.2147/PRBM.S421549

Lisnyj, K., Pearl, D. L., McWhirter, J. E., & Papadopoulos, A. (2022, June 01). Examining the influence of human and psychological capital variables on post-secondary students' academic stress. *Studies in Higher Education*, *47*(12), 2508-2522. https://doi-org.ezproxy.waikato.ac.nz/10.1080/03075079.2022.2083101

Logan, J., Hughes, T., & Logan, B. (2016). Overworked? An Observation of the Relationship Between Student Employment and Academic Performance. *Research, Theory & Practice*, *18*(3), 250-262. https://doi-org.ezproxy.waikato.ac.nz/10.1177/1521025115622777

Lupșa, D., Vîrga, D., Maricuțoiu, L. P., & Rusu, A. (2020). Increasing psychological capital: a pre-registered meta-analysis of controlled interventions. *Applied Psychology: An International Review*, *4*(69), 1506-1556. https://doi-org.ezproxy.waikato.ac.nz/10.1111/apps.12219

Luthans, B. C., Luthans, K. W., & Avey, J. B. (2014). Building the leaders of tomorrow: The development of academic psychological capital. *Journal of Leadership &*

Organizational Studies, *21*(2), 191-199. https://doi-org.ezproxy.waikato.ac.nz/10.1177/1548051813517003

Luthans, F., Avey, J., Avolio, B., Norman, S. M., & Combs, G. (2006). Psychological capital development: Toward a micro-intervention. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, *27*(3), 387-393. https://doi.10.1002/job.373

Luthans, F., Avolio, B. J., Avey, J. B., & Norman, S. M. (2007). Positive Psychological Capital: Measurement and Relationship with Performance and Satisfaction. *Personnel Psychology*. https://DOI:10.1111/j.1744-6570.2007.00083.x

Luthans, F., & Youssef-Morgan, C. M. (2017, January 23). Psychological Capital: An Evidence-Based Positive Approach. *Annual Review of Organizational Psychology and Organizational Behavior*, *4*, 339-366. https://doi.10.1146/annurev-orgpsych-032516-113324

Maesschalck, R. D., Jouan-Rimbaud, D., & Massart, D. L. (2000). The Mahalanobis distance. *Chemometrics and Intelligent Laboratory Systems*, *50*(1). https://doi.org/10.1016/S0169-7439(99)00047-7

Meade, A. W., & Craig, B. S. (2012). Identifying careless responses in survey data. *Psychological Methods*, *17*(3), 437-455. https://doi.org/10.1037/a0028085

Ministry of Education. (2021). *Students working while studying*. Ministry of Education. https://web-assets.education.govt.nz/s3fs-public/2025-03/2.-1271442-Students-working-while-studying_Redacted.pdf?VersionId=8PWRBIBq1eXz3fZdYDaDVgTPecSqHkHh

Murphy, R., Scott-Clayton, J., & Wyness, G. (2018). The end of free college in England: Implications for quality, enrolments, and equity. *National Bureau of Economic Research*, 2-31. https://DOI:10.3386/w23888

Newman, A., Ucbasaran, D., Zhu, F., & Hirst, G. (2014, January 27). Psychological Capital: A Review and Synthesis. *Journal of Organizational Behavior*, *35*(1), 120-138. https://doi.org/10.1002/job.1916

Nissen, S., Hayward, B., & McManus, R. (2019). Student debt and wellbeing: a research agenda. *Kōtuitui: New Zealand Journal of Social Sciences Online*, *14*(2), 245-256. https://doi.org/10.1080/1177083X.2019.1614635

Owen, M., Kavanagh, P., & Dollard, M. (2017). An integrated model of work-study conflict and work-study facilitation. *Journal of Career Development*, *45*(5). https://DOI:10.1177/0894845317720071

Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. Journal of Applied Psychology, 88(5), 879-903. https://DOI:10.1177/15210251221149209

Riggert, S. C., Boyle, M., Petrosko, J. M., Ash, D., & Rude-Parkins, C. (2006). Student Employment and Higher Education: Empiricism and Contradiction. *Spring*, *76*(1), 63-92. https://DOI:10.3102/00346543076001063

Riolli, L., Savicki, V., & Richards, J. (2012, December). Psychological Capital as a Buffer to Students Stress. *Psychology*, *3*(12), 1202-1207. https://doi.10.4236/psych.2012.312A178

Robotham, D. (2012). Student part-time employment: characteristics and consequences. *Education + Training*, *54*(1), 65-75. https://DOI:10.1108/00400911211198904

Rochford, T. (2004). Whare tapa wha: a Maori model of a unified theory of health. *The Journal of Primary Prevention*, *25*(1), 41-57. https://DOI:10.1023/B:JOPP.0000039938.39574.9e

Schoffstall, D. G., & Arendt, S. W. (2014, March 14). Benefits and challenges encountered by working students. *Journal of Hospitality & Tourism Education*, *26*, 10-20. https://doi.org/10.1080/10963758.2014.880614

Seligman, M. E. P. (2011). Flourish: A Visionary New Understanding of Happiness and Well-Being (1st ed.). Atria Books.

Siu, O. L., Bakker, A. B., & Jiang, X. (2014). Psychological Capital Among University Students: Relationships with Study Engagement and Intrinsic Motivation. *Journal of Happiness Studies*, *15*(4), 979-994. https://doi.10.1007/s10902-013-9459-2

Stallman, H. M., & Hurst, C. P. (2016). The university stress scale: measuring domains and extent of stress in university students. *Australian Psychologist*, *51*(2), 128-134. https://doi.org/10.1111/ap.12127

Summer, R., McCoy, M., Rodriguez, E., & Trujillo, I. (2023). Support for Working Students: Understanding the Impacts of Employment on Students' Lives. *Journal of College Student Retention: Research, Theory & Practice*, *26*(4), 1123-1146. https://doi-org.ezproxy.waikato.ac.nz/10.1177/15210251221149209

Sutton, A., & Roemer, A. (2024). A-Hero: integrating authenticity into the psychological capital model. *International Journal of Applied Positive Psychology*, *9*, 1059-1081. https://doi.org/10.1007/s41042-024-00171-4

Tennant, R., Hiller, L., Fishwick, R., Platt, S., Joseph, S., Weich, S., Parkinson, J., Secker, J., & Stewart-Brown, S. (2007). The Warwick-Edinburgh Mental Well-being Scale (WEMWBS): development and UK validation. *Health Qual Life Outcomes*, *5*(63). https://doi:10.1186/1477-7525-5-63

Tennant, R., Hiller, L., Fishwick, R., Platt, S., Joseph, S., Weich, S., Parkinson, J., Secker, J., & Stewart-Brown, S. (2007). The Warwick-Edinburgh mental well-being scale

(WEMWBS): development and UK validation. *Health Qual Life Outcomes*, *5*(1), 63. https://doi.org/10.1186/1477-7525-5-63

Walker, M., & Huthwaite, M. (2023). "Starting off Well" - The quest of finding suitable accommodation in Wellington and the impacts on student wellbeing. *The New Zealand Medical Student Journal*, (35), 27-30.

Watson, L. M., & Howells, B. (2025). Short-term pain for long-term gain? Financial implications of university fees and unpaid placements on workers in healthcare and education industries. *Journal of the Royal Society of New Zealand*, 1-20. https://doi.org/10.1080/03036758.2025.2460575

Youssef, C. M., & Luthans, F. (2007, October). Positive Organizational Behavior in the Workplace. The Impact of Hope, Optimism, and Resilience. *Journal of Management*, *33*(5), 774-800. https://doi.10.1177/0149206307305562

Zilvinskis, J., & McCormick, A. C. (2019). Do working students buy into HIPs? Journal of College Student Development, 60(5). https://dx.doi.org/10.1353/csd.2019.0049.

Appendix A

Ethics Approval Letter

Te Wānanga o Ngā Kete | ***Division of Arts, Law, Psychology & Social Sciences***

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THE UNIVERSITY OF WAIKATO
Te Whare Wānanga o Waikato

Dr Anna Sutton

School of Psychological and Social Sciences
Psychology Programme

20 February 2025

Dear Anna

Re: **FS2025-02: Working whilst studying, harmful or helpful?**

Thank you for submitting your revised application to the ALPSS Human Research Ethics Committee. We have reviewed the final electronic version of your application and the Committee is now pleased to offer formal approval for your research activities.

We encourage you to contact the committee should issues arise during your data collection, or should you wish to add further research activities or make changes to your project as it unfolds. We wish you all the best with your research. Thank-you for engaging with the process of Ethical Review.

Kind regards

Dr Amy Bird, Convenor
Division of Arts, Law, Psychology & Social Sciences Human Research Ethics

Appendix B

Consent Information

Project title: Working whilst studying, helpful or harmful?

You have been invited to participate in this research study investigating how working whilst studying affects students. We want to investigate whether working whilst studying is good or bad for students and if your personal resources affect this relationship.

This research project is being supervised by Dr Anna Sutton, Senior Lecturer in Psychology at the University of Waikato, New Zealand and carried out by graduate students under her supervision. The findings may be published in peer-reviewed journals.

Participants role: You will be asked to complete a series of questions asking you about how many hours you typically work each week, and thoughts you may have about yourself and your studies. The average time it takes to complete these questions is estimated to be 15-20 minutes. Please take your time in working through the questionnaires.

This is not a test, so there are no right or wrong answers and there are no risks involved in taking part in this research. Please be as honest as you can. Confidentiality and participants' rights is as follows; Participation in this research is voluntary. All data is anonymised meaning no personal information can be linked between yourself and any answers given. You can withdraw from the study at any time and without giving a reason by simply closing your browser window when completing the survey or by contacting a member of the research team during the intervention stage. You are able to withdraw at any time and still receive course credit for any tasks you have already completed.

Storage of data: Data will be stored for a minimum of 5 years after completion of this research project. The data will be stored securely by Dr Anna Sutton and the research investigators of this project will have access to this data. If required for paper publication, anonymised data may be shared in public repositories.

Funding: This project has no external funding.

For further information or if you have any questions related to the research project, please email the researchers: Kimberly Bovill (kb197@students.waikato.ac.nz), Irene Irvine (ii25@students.waikato.ac.nz) or Shanice Herms (shanice.herms@waikato.ac.nz).

Ethics approval

This research project has been approved by the Human Research Ethics Committee of the Division of Arts, Law, Psychology and Social Sciences at the University of Waikato.
Any questions about the ethical conduct of this research may be sent to the Secretary of the Committee, email alpss- ethics@waikato.ac.nz, postal address, Division of Arts, Law, Psychology and Social Sciences, University of Waikato, Te Whare Wānanga o Waikato, Private Bag 3105, Hamilton 3240.

Consent: By proceeding with the online survey, you are agreeing that:

(1) you have read and understood this information

(2) questions about your participation in this study have been answered satisfactorily

(3) you are aware of the potential risks

(4) you are taking part in this research study voluntarily

(5) anonymised data may be shared in public research repositories.

(Check box for providing consent and agreeing to participate)