

## PART 2: GENERAL

# WILL WORKING STUDENTS FLOURISH OR GIVE UP? EXPLORING THE INFLUENCE OF ACADEMIC PSYCHOLOGICAL CAPITAL, GRIT, AND TIME MANAGEMENT

**W. A. Amadi\***

<https://orcid.org/0000-0001-8532-1505>

**M. du Plessis\***

<https://orcid.org/0000-0002-3865-6959>

**S. Solomon\***

<https://orcid.org/0000-0003-3116-2451>

\*Department of Industrial Psychology  
University of the Western Cape  
Cape Town, South Africa

### ABSTRACT

Working students are faced with challenges and responsibilities both at university and in their employment. In attempting to study the books and chapters assigned, meet assignment deadlines, participate in extracurricular activities, and functions at work, working students may be overwhelmed. The primary aim of this study was to examine and understand the influence of non-cognitive factors (including Psychological Capital, time management, and grit) on flourishing and the working student's intention to quit their studies. A non-probability sampling technique indicating convenience sampling and purposive sampling were employed to recruit respondents. The sample ( $n = 194$ ) was from a residential university in the Western Cape of South Africa. Non-cognitive variables had a positive relationship with flourishing and a negative relationship with intention-to-quit studies. Academic mindset measured as Psychological Capital explained the largest proportion of the variance in flourishing and intention-to-quit studies. Lecturers, counsellors, and university officials should collaborate to incorporate programmes that will aid in developing these non-cognitive variables into the university's curriculum. These interventions may help improve academic success and throughput of working students.

**Keywords:** psychological capital, grit, time management, flourishing, intention to quit, working students

## INTRODUCTION

Studying and working can be a daunting task. Succeed is not only achieved by knowledge about content of program and academic capabilities needed but also on cultivating non-cognitive components (Fong et al. 2017). Specifically, students who work need to develop competencies to enable their flourishing and academic achievement (Farrington et al. 2012), and not disregarding knowing the course content and academic competence. The mental health and flourishing of students are of interest to tertiary (Van Zyl and Rothmann 2012). As higher education institutions attempt to adapt to an increasing number of student intake, many of whom experience psychological challenges, the higher institution community sees that non-academic elements, which includes emotional well-being as well as wellness, remain closely linked with academic accomplishment (Hartmann and Prichard 2018). By identifying non-cognitive factors that can be developed; institutions can strategise and implement interventions to improve these areas of students. Failing to do so may result in premature dropout of working students who cannot cope, or negative impact on the working student's wellbeing.

Students who are unable to adapt to the demands of graduating in record time may quit prematurely resulting in reduced confidence in their abilities. Flourishing students have better performances, good attendance rate, improved degrees of fulfilment, attainment of good grades and are intrinsically motivated to graduate (Keyes 2006). Therefore, we focussed our inquiry on affective factors and characteristics of working students, specifically academic psychological capital (PsyCap), grit and time management, and its relationship with flourishing and intention to quit studying.

## REVIEW OF THE LITERATURE

Non-cognitive factors are competencies essential for academic student success (Nagaoka et al. 2013). Non-cognitive factors, such time management, grit, motivation, and self-regulation play critical roles in the success of individuals both at school and their place of work (Heckman and Rubinstein 2001). In trying to grasp the effect these constructs have on student achievement, the academic success model was developed showing that non-cognitive factors such as academic mindset (e.g., a sense of belonging, self-sufficiency), academic perseverance (e.g., determination), learning strategies (e.g., management of time), social skills (e.g., interactive capabilities), and academic behaviours (e.g., going to class completing assignments) impact academic accomplishments (Farruggia et al. 2018). Currently, specific components of the academic success model were utilised. These components are academic mindset (conceptualised as academic psychological capital), learning strategies (conceptualised as time management) and academic perseverance (conceptualised as grit). These factors are indicated

to positively and negatively impact flourishing and intention to quit studies respectively of students who work and study. As such, flourishing and intention to quit is defined first, followed by the non-cognitive constructs that make up the present study.

### **Flourishing within the academic context**

Keyes (2002) explained flourishing as a state of having positive emotions and operating optimally, people's discernment, coupled with evaluations of the value of the life they live. Past research has shown that flourishing impacts on academic performance-impeding elements, for example, the absence of discretion, self-regulation, and stalling (Howell 2009; Seligman 2011). Flourishing has moreover been discovered to affect a variety of outcomes within the academic environment (Howell 2009; Seligman 2011). While controlling certain variables such as relevant wellness-indices and demographics, flourishing influenced academic performance positively (Datu 2018).

### **Intention to quit**

Quitting and dropping out of school have been identified as concerns both in South Africa and internationally; and this has been linked to a variety of reasons (Council on Higher Education (CHE) 2018). Research have shown that some of the reasons can be attributed to person-setting-fit or academic integration into the higher institution (Allen and Robbins 2008; Christie, Munro, and Fisher 2004), level of secondary school accomplishment (Leppel 2005; Tracey and Robbins 2006), age (Long, Ferrier, and Heagney 2006), choice of course to study (Christie et al. 2004; Long et al. 2006) studying full or part-time (Long et al. 2006; Yorke 2000), Grade Point Average (French, Immekus, and Oakes 2005) and attitude towards studies (Wintre et al. 2006). In the current study, intention-to-quit studies due work and study demands is an indicator of failure to attain academic success

### **Academic mindset: Academic Psychological Capital**

Psychological Capital (PsyCap) implies people's positive psychological condition. This comes in the form of being self-assured (self-efficacy) to invest the essential energy to flourish when faced with a difficult task; by making a positive acknowledgement (optimism) about being successful at some point; determined in achieving set aims and, when needed, redirecting ones path to attain objectives (hope) to thrive; when faced with trials and hardship, being tenacious to press on and outperform past levels (resilience) to achieve success (Luthans and Youssef 2004). Setar, Buitendach, and Kanengoni (2015) proposed that PsyCap is by nature transient implying that it can be developed. Thus, PsyCap can be enhanced and improved in any

individual during his or her life (Lewis 2011). PsyCap has been contextualised in the academic environment as academic PsyCap. Luthans et al. (2012, 254), claim academic PsyCap implies a students' "positive psychological state, consisting of hope, efficacy, resilience, and optimism to achieve academic success". Academic PsyCap fosters positive cognitive evaluation of situations and the practices needed for consideration, clarification, and preservation of positive and invaluable recollections (Luthans and Youssef-Morgan 2017).

PsyCap has been previously found to influence outcomes of well-being and flourishing. PsyCap prompts cognitive, emotional, psychological, and social systems that promote fulfilment and well-being (Youssef-Morgan and Luthans 2015). According to Roemer and Harris (2018), individuals high on the PsyCap scale can decode situations in a sensible way, feel reassured and emboldened, and can easily adapt irrespective of difficulties that deter flourishing. Individuals will thrive if positive effects, for instance wellbeing, hopefulness, and encouraging self-regard, is greater than the negative effects (Diehl, Hay, and Berg 2011). It is therefore expected that PsyCap directly related to flourishing of working students.

Though there are limited research on PsyCap with the educational environment, PsyCap was found to directly impact academic performance (You 2016). PsyCap identifies with students' commitment to learn as well as self-regulated learning (You, Kim, and Kang 2014). These suggest that academic PsyCap could be a noteworthy resource aiding educational accomplishment; to support these findings, we suggest PsyCap is inversely related to intention to quit studies.

### **Academic perseverance: Grit**

Duckworth et al. (2007) presented the idea of grit. Grit is described as the zeal and tenacity for long-haul objectives. It involves working tirelessly through difficulties, maintaining efforts, and enthusiasm over a significant period regardless of setbacks, affliction, and plateaus in progress (Duckworth et al. 2007). Several studies investigated the influence of grit within the academic environment. Duckworth and Seligman (2005) found grit, self-discipline, and perseverance are better predictors of academic success in colleges than academic assessment tests (SAT) or intelligence quotient tests. Similarly, Perkins-Gough (2013) found the grit scores of students were the most significant predictors of student completion of a programme.

Irrespective of performing poorly in class, students with grit will strive for better results (Farrington et al. 2012). They employ alternative techniques to understand study materials rather than quit. Duckworth and Quinn (2009) stated that grit affords high-level performers the energy to get and remain at the top. Grit was found to ensure that certain individuals maintain effort even when difficulties are encountered. Similar to findings by Duckworth et al. (2007),

we propose a positive impact of grit on the flourishing of working students.

Despite incurring additional cost grifter person are less prepared to quit when they fail (Lucas et al. 2015). As opposed to persons with lesser grit level, gritty individuals exert more effort when failing and are bound to either gain or lose confidence as opposed to resigning (Lucas et al. 2015). We expect that there would be a negative impact of grit on working students' intention to quit.

### **Learning strategies: Time management**

Proper management of time remains a concern for students, more so for working students. Managing time is no easy feat, despite its importance (Al-Zoubi 2016). Time management abilities include prioritising and arranging work, assessment preparation, and attending classes (Sansgiry, Bhosle, and Sail 2006). Students who implement proper management of time strategies and study techniques are expected to have better academic achievements . Improper management of time practices, for example, allotting less time for work and study and missing deadlines are seen as stress inducing and reduces performance in academics (MacCann, Fogarty, and Roberts 2012).

Farrington et al. (2012), proposes that scholars are less likely to finish coursework if they are not organised. Incomplete coursework and not preparing diligently impact academic performance. Less desirable academic result negatively impacts student attitudes leading to decreased academic fortitude (Farrington et al. 2012). Excellent management of time skills resulted in enhanced psychological prosperity, increased confidence, and improved wellness (Wintre et al. 2011). Therefore, it is proposed that there would be a direct link between time management and the flourishing of working students.

Highlighted by Doherty (2006), the majority of students who quit or fail is a result of difficulty in managing their time effectively. Grissom, Lebb, and Mitani (2015) found evidence that proper time management leads to reduced work pressure. Thus, an influence of time management on intention to quit is expected.

### **Study objective**

The objective of the current study is to establish the relationships amongst non-cognitive factors and academic success outcome variables, namely flourishing and intention to quit studies. We also propose to determine which of the non-cognitive elements explain the biggest ratio of the variance in flourishing and intention to quit studies in order to prioritise interventions. We therefore propose to explore the following objectives:

- To determine if a relationship exists between non-cognitive factors, *viz* academic PsyCap, grit and time management; and respectively, flourishing and intention to quit studies of working students.
- To determine which of the non-cognitive factors explain the biggest proportion of the variance in, respectively, flourishing and intention to quit studies of working students.

## METHODOLOGY

A quantitative design implementing a purposive sampling methodology was utilised. Part-time students formed the study population at a chosen residential tertiary institution in the Western Cape. The population comprised 2416 registered students in formal employment (i.e., registered as part-time students).

### Data collection

Ethical clearance was obtained (reference number: HS20\_4\_41) prior to commencing the research study. The researchers utilised Google forms to develop an online survey due to social distancing measures required by the Covid-19 pandemic at the time of data gathering. An announcement with the survey link was sent to members of the target population through the communications channel of the selected university. The final sample comprised of 194 working students.

### Sample characteristics

The sample comprised mostly women ( $n = 124$ ), most of them falling in the age range of 25–29. ( $n = 45$ ). A large portion of the participants were enrolled as undergraduates (70%;  $n = 136$ ), the remainder were enrolled as postgraduates. All the participants had jobs, 92.3 per cent ( $n = 179$ ) full-time employed. Bulk of participants specified that they had wards (56.4%) and 48.5 per cent ( $n = 94$ ) were married.

**Table 1:** Biographical information

Item	Category	Frequency (n)	Percentage (%)
<b>Gender</b>	Male	70	36
	Female	124	64
<b>Age</b>	18–24	11	5.7
	25–29	45	23.2
	30–34	35	18
	35–39	40	20.6
	40–44	35	18
	45–50	17	8.8

Item	Category	Frequency (n)	Percentage (%)
	Above 50	11	5.7
<b>Marital Status</b>	Married	94	48.5
	Single	90	46.4
	Divorced	8	4.11
	Widowed	2	1
<b>Student registration</b>	Undergraduate	136	71.
	Doctorate	58	29.9
<b>Employment type</b>	Full-time	179	92.3
	Part-time	8	4.1
	Self-employed	7	3.6
<b>Daily working hours</b>	3–4 hours	3	1.6
	5–6 hours	9	4.6
	7–8 hours	129	66.5
	More than 8 hours	53	27.3
<b>Number of dependents</b>	None	84	43.3
	One	29	15
	Two	57	29.4
	Three	16	8.2
	More than three	8	4.1

## Measuring Instruments

The instruments utilised in the study include a demographic form, four assessment instrument, and a self-constructed intention-to-quit questionnaire.

### Academic PsyCap Questionnaire (PCQ)

The 24-item PsyCap questionnaire authenticated for use in academic territory (Luthans, Luthans, and Avey 2014; Luthans, Luthans, and Palmer 2016) was used to measure PsyCap. Studies conducted reported reliabilities of 0.93 and 0.914, separately (Luthans et al. 2016; Luthans, Luthans, and Chaffin 2019). The measure was also found to be reliable ( $\alpha = 0.940$ ) in the present study.

### Mental health continuum – short form (MHC-SF)

The MHC-SF (Keyes 2006) includes 14 items indicating different prosperous emotions which measures encouraging mental well-being. Responses are presented on a six-point scale (never, to every day) (Karaś, Ciecuch, and Keyes 2014). In South Africa reliability of (0.74) was achieved (Keyes et al. 2008). Other studies had internal consistencies of (0.89 and 0.90) for the scale (Basson and Rothmann 2019; Van Zyl and Rothmann 2012). A 0.941 reliability coefficient of was found in this study.

### **The grit-perseverance of effort subscale**

The scale was comprised of six questions on a 5-point scale ranging from “not like me” to “very much like me” (Duckworth et al. 2007). A reliability of ( $\alpha = 0.81$ ) was recorded among first year students (Mason 2018). Cronbach alpha of 0.73 was also recorded among university students in South Africa (Urban and Richard 2015). The grit scale was also found reliable in the current study ( $\alpha = 0.819$ ).

### **The time management short-range planning subscale**

A seven-item presented on a 5-point Likert scale was utilised (Britton and Tesser 1991). Responses ranged from always to never. Farruggia et al. (2018), recorded a Cronbach alpha of 0.87 among college students. In Turkey, the scale had a Cronbach alpha of 0.89 among students. This is in line with the reliability analysis conducted for the present study ( $\alpha = 0.887$ ).

### **Intention to Quit Scale**

A self-constructed questionnaire was utilized after critical review of intention to quit within organisational settings. The scale consisted of three items on a 5-point scale. The instrument was self-developed hence no reliability had been on record. For this study, the reliability coefficient was 0.620. This is below the minimum acceptable coefficient to be considered reliable. However, this may be credited to the limited quantity of items. Nevertheless, the results from this instrument were interpreted with caution.

## **RESULTS**

The correlation analysis illustrates a meaningful direct association between PsyCap levels and flourishing levels of the part-time student ( $r = 0.546, p < 0.01$ ). A substantial direct connection between the grit levels and flourishing levels was established ( $r = 0.463, p < 0.01$ ). And a noteworthy direct association existed between the time management levels and flourishing levels of these participants ( $r = 0.437, p < 0.01$ ).

The outcome established a considerable inverse connection between PsyCap levels and intention-to-quit studies of the participants ( $r = -0.455, p < 0.01$ ). Similarly, connection between grit levels and intention to quit studies were significantly negative ( $r = -0.292, p < 0.01$ ). Finally, some negative connection was established between time management and intention to quit ( $r = -0.177, p < 0.05$ ). A weak connection was established, indicating that there is a possibility that with the influence of other factors, as these students employ time management techniques, they are less likely to quit their studies.



**Table 2:** Descriptive and correlation analysis results (n = 194)

Variable	<i>M</i>	<i>SD</i>	$\alpha$	1	2	3	4
1. PsyCap	4.432	.837	.940	1			
2. Grit	4.092	.788	.819	.492**	1		
3. Time management	3.259	.869	.887	.404**	.440**	1	
4. Flourishing	4.249	1.080	.941	.546**	.463**	.437*	1
5. Intentions to quit	2.309	1.045	.620	-.455**	-.292**	-.177*	-.393*

Note: *M* = Mean, *SD* = standard deviation,  $\alpha$  = Cronbach alpha reliability coefficient, \*\* = significant at the .01 level; \*significant at the .05 level

Whilst controlling the impact of the demographic factors, the fraction of the variance described by the non-cognitive constructs was analysed and established using hierarchical regression analysis. Demographic variables were inputted in the first step; the independent constructs PsyCap, grit, and time management were inserted second. Flourishing and intention to quit stood the dependent variable for both analyses.

**Table 3:** Hierarchical multiple regression analysis explaining the variance in flourishing and intention to quit from demographic variables, PsyCap, grit, and time management (n = 194)

Predictor	Flourishing			Intention to quit		
	$R^2$	$\Delta R^2$	$\beta$	$R^2$	$\Delta R^2$	$\beta$
<b>Step 1</b>	.180**			.081**		
Academic status			-.015			-.060
Employment status			.061			-.045
Daily working hours			-.045			.096
Age			.359**			-.101
Gender			-.203			.202**
Marital status			-.140			-.074
Number of children			.019**			.134**
<b>Step 2</b>	.468**	.288		.246**	.165	
Academic status			.004			-.092
Employment status			.035			-.009
Daily working hours			-.043			.085
Age			.200**			.012
Gender			-.128*			.105*
Marital status			-.166			-.051
Number of children			.139			.055
PsyCap			.299**			-.393**
Grit			.174**			-.090**
Time management			.232**			.019

Note: \*\* =  $p < 0.01$ ; \* =  $p < 0.05$ ;  $\beta$  = standardised Beta coefficient

Findings displayed in Table 3, shows that in Step 1 the demographic factors explained 18 per cent ( $R^2$ ) of the variance in flourishing in the participants. This value increases to 46.8 per cent of the variance explained when PsyCap, grit and time management is included in Step 2. Implying the added variance of 28.8 per cent in flourishing above that accounted for by the demographic factor was as a result of PsyCap, grit and time management. The range of Beta scores in Step 1 were -.203 to 0.359, which are statistically significant. With age and gender contributing the highest portion of  $\beta = 0.359$  and  $-0.203$  ( $p = 0.00$ ) respectively towards

explaining the variance in flourishing. Beta scores in Step 2 ranged from -0.166 to 0.299, with PsyCap accounting for a significant portion of the variance in flourishing ( $\beta = 0.299, p < 0.01$ ), followed by time management ( $\beta = 0.232, p < 0.01$ ) and grit ( $\beta = 0.174, p < 0.01$ ) respectively.

The outcomes also show that demographic variables account for 8.1 per cent of the variance in intention to quit of students who work. This portion of the variance ( $R^2 = .081; F(7, 186) = 2.338, p = 0.026$ ) is statistically significant. In step 2, the variance explained ( $R^2$ ) increase to 24 per cent due to the addition of the non-cognitive constructs. This implies PsyCap, grit, and time management is responsible for a 16.5 per cent increase in variance in intention-to-quit studies described, beyond the variance contributed by demographic elements.

This increase in variance ( $R^2 = .246; F(10, 183) = 5.986, p = 0.000$ ) is statistically significant. Beta scores in Step one ranged from -0.101 to 0.202, with gender accounting for a major section of variance explained  $\beta = 0.202 (p = 0.00)$ . Beta scores in Step 2 ranged from -0.393 to 0.105, with PsyCap reporting a significant portion of the variance in flourishing ( $\beta = -0.393, p < 0.01$ ). PsyCap therefore explains the biggest portion of variance in the flourishing and intention to quit studies of students who work and study.

## DISCUSSION

This study explored how some non-cognitive constructs can impact working students' flourishing, consequently, attaining academic success amidst the difficulties faced, or how these factors impact their likeliness to quit their studies. A significant positive correlation was established between PsyCap and flourishing. Suggesting that an increase in PsyCap will result in flourishing also increasing. This result concurs with research conducted in Australia among school kids as well as youngsters which a medium to strong connection was observed between academic PsyCap and flourishing (Finch, Farrell, and Waters 2020). The current outcome is supported in other studies which showed people who have enhanced levels of PsyCap result in increased levels of flourishing (Chen et al. 2019; Manzano-Garcia and Ayala 2017). Youssef-Morgan and Luthans (2015) suggests that applied and valuable resources and mechanisms are provided by PsyCap to improve overall well-being and therefore flourishing in people.

The levels of grit of these students and their corresponding flourishing levels are significantly connected positively. A moderate relationship is observed, suggesting that as grit levels surge, flourishing likewise rises. Within the academic environment, this result is reinforced by a cross-cultural study which recognised that grit and flourishing are linked positively (Datu et al. 2020). Though limited studies have been documented on the link between grit and flourishing, perseverance of effort among Chinese students was found to be negatively related with depression (Zhang et al. 2018). Similarly, through the pandemic (Covid-19) grit of

scholars in America was found to be correlated with their subjective well-being (Bono, Reil, and Hescox 2020).

Findings in the current study also established a moderate correlation of flourishing and time management. This result proposes that the flourishing of the participants improves as they manage their time better. Eldeleklioglu, Yilmaz, and Gultekin (2010) substantiated outcomes of the present study demonstrating that time planning as a component of time management is positively linked to psychological wellbeing. With adequate planning of time, achieving set goals can be a contributing element to the well-being of individuals (Eldeleklioglu et al. 2010).

PsyCap was concluded to be negatively connected to working students' intention to quit studies. You et al. (2014) also recognised that increased PsyCap levels improves scholars' self-coordinated learning and their commitment to learn. The importance of PsyCap in the attainment of personal and academic goals has been established in some studies (Luthans et al. 2014; Luthans et al. 2012; Mercan 2016). According to Riolli, Savicki, and Richards (2012) PysCap serves as a buffer to ease students' stress. PsyCap offers the means to improve students' insusceptibility to stressor or aid the way students analyse and categorise challenging situations to see them as opportunities rather than threats that will push them to giving up (Riolli et al. 2012).

As an outcome, a negative correlation amongst grit and working students' intention to quit was established. Suggesting that as these students continue to persevere, they are less likely to quit. After conducting a binary logistic regression examination, found that grit was a better forecaster of accomplishment ratios in contrast to other variables (Duckworth et al. 2007). Among four researches performed, Eskreis-Winkler et al. (2014) concluded that individuals with high grit levels were more unwilling to leave their life obligations.

Time management was concluded to have statistically significant negative link to working students' intention to quit studies. Intention to quit studies by students who work also is likely to reduce if proper time management strategies are implemented. Improper time management strategies were concluded to lead to female students quitting higher education (Wudu and Getahun 2009; Ziddy 2007). Whereas adequate time management strategies buffers stress from academics and stress predicts quitting (Misra and McKean 2000).

Hierarchical regression analysis found demographic variables to be significant predictors of flourishing and intent to quit studies of working students. Over time demographic variables have been established to be critical predictors of students' graduating and performing academically. Richardson, Abraham, and Bond (2012) supported this finding stating that the probability of students finishing, and graduating are often influenced by demographic variables. According to Akhtar and Kroener-Herwig (2019), gender was concluded to be forecaster of

psychological wellbeing, implying that females had lower levels of psychological well-being than their male counterparts. Age has also been found to be considerably related to academic performance, suggesting that older students tend to outperform their younger colleagues (Alstete and Beutell 2004; Lobb et al. 2006). This could be as a result of mature students being more invested in completing their degrees leading to better performances academically.

The non-cognitive factors were predictors of flourishing and intention to quit with PsyCap established as the highest significant predictor. This discovery is in line with preceding research papers that has established PsyCap and its components predict a vast proportion of the changes in flourishing (Avey et al. 2010; Datu and Valdez 2016; Flinch et al. 2020). Psychological, affective, cognitive, and social well-being can be improved by acknowledging the impact of PsyCap (Datu and Valdez 2016). PsyCap is beneficial to improving flourishing levels of individuals when developed (Avey et al. 2011; Culbertson, Fullagar, and Mills 2010; Riolli et al. 2012).

Furthermore, if students utilise inadequate study techniques, those high on PsyCap tend to re-evaluate and implement different study methods until their goals are achieved (Luthans et al. 2012). They tend to be tenacious and more willing to devote the necessary energy to attain success (Avey et al. 2011). Therefore, it is imperative that universities and colleges assist and give the required support in developing PsyCap as a resource.

### **Practical implications for higher education**

By assumption, if asked the main aim of attending a university, it will be agreed that completing and gaining a degree is the primary objective. To attain this milestone, academic skills, and content knowledge of the course of study is not sufficient. The development of additional skills, behavioural patterns, attitudes, and strategies is critical to flourish and maintain performance (Farrington et al. 2012).

Institutions of higher learning are employed to include programmes designed to develop or improve non-cognitive constructs as part of their curriculum. These programmes would promote the positive functioning of students by providing support that nurtures long-lasting valuable resources such as grit, PsyCap and time-management (Datu and Valdez 2016). Interventions targeted at psychological assets and how they can be utilised may encourage students to meet their goals and improve retention rates (Luthans et al. 2012). Such programme should investigate the impact of these non-cognitive variables over a long period. Implementation of such a programme would be beneficial to enhance educational engagement and well-being and also reduce quitting entirely, nonattendance, and depression (Datu and Valdez 2016).

## LIMITATIONS AND RECOMMENDATIONS

The current research utilised a cross-sectional design on a little sample size, that could raise concerns about how valid the findings are. Forthcoming studies could make use of longitudinal designs to reinforce the findings of this study. It is not clear how the results of the study would differ for full-time students; therefore, future research could include participants studying full-time and part-time, from various institutions across South Africa. Online self-reported data was relied on to investigate these non-cognitive variables, upcoming research is advised to use varying methods of collecting data such as focus groups and peer-report. The self-articulated intention to quit questionnaire reported less than acceptable levels of reliability lower than the 0.70 caps to be deemed consistent. Upcoming studies could employ a standardised instrument to measure the intention to quit studies.

## CONCLUSION

Non-academic and academic factors remain vital for working students to be successful academically. Irrespective of how beneficial it may be, studying and working together is demanding and stressful (Hall 2010). The study was aimed establishing the relationship among some non-cognitive variables and working students' intention to quit and flourishing, and results indicate significant relationships between these variables. Furthermore, PsyCap explained the biggest part of the variation in flourishing and intent to quit for working students. Therefore, institutions of higher education are encouraged to include academic PsyCap development in curricular or co-curricular activities.

## REFERENCES

- Akhtar, Mubeen and Birgit Kroener-Herwig. 2019. "Coping Styles and Socio-demographic Variables as Predictors of Psychological Well-Being among International Students Belonging to Different Cultures." *Current Psychology* 38: 618–626. doi:10.1007/s12144-017-9635-3.
- Allen, Jeff and Steven B. Robbins. 2008. "Prediction of College Major Persistence Based on Vocational Interests, Academic Preparation, and First-Year Academic Performance." *Research in Higher Education* 49: 62–79. <https://doi.org/10.1007/s11162-007-9064-5>.
- Alstete, Jeffrey W. and Nicholas J. Beutell. 2004. "Performance Indicators in Online Distance Learning Courses: A Study of Management Education." *Quality Assurance in Education* 12(1): 6–14. <https://doi.org/10.1108/09684880410517397>.
- Al-Zoubi, Maysoon. 2016. "The Effect of the Time Management Art on Academic Achievement among High School Students in Jordan." *Journal of Education and Practice* 7(5): 158–167. <https://eric.ed.gov/?id=EJ1092359>.
- Avey, James, B., Fred Luthans, Ronda M. Smith, and F. Noel Palmer. 2010. "Impact of Positive Psychological Capital on Employee Well-Being Over Time." *Journal of Occupational Health Psychology* 15(1): 17–28. <https://doi.org/10.1037/a0016998>.

- Avey, James, B., Rebecca A. Reichard, Fred Luthans, and Ketan H. Mhatre. 2011. "Meta-analysis of the impact of positive psychological capital on employee attitudes, behaviors, and performance." *Human Resource Development Quarterly* 22(2): 127–151. <https://doi.org/10.1002/hrdq.20070>.
- Basson, Mariëtta, J. and Sebastiaan Rothmann. 2019. "Pathways to flourishing among pharmacy students: The role of study demands and lecturer support." *Journal of Psychology in Africa* 29(4): 338–345. <https://doi.org/10.1080/14330237.2019.1647953>.
- Bono, Giacomo, Kresimir Reil, and Jadwiga Hescocx. 2020. "Stress and wellbeing in urban college students in the U.S. during the COVID-19 pandemic: Can grit and gratitude help?" *International Journal of Wellbeing* 10(3): 39–57. <https://doi.org/10.5502/ijw.v10i3.1331>.
- Britton, Bruce, K. and Abraham Tesser. 1991. "Effects of Time-Management Practices on College Grades." *Journal of Educational Psychology* 83(3): 405–410. <https://doi.org/10.1037/0022-0663.83.3.405>.
- CHE *see* Council on Higher Education.
- Chen, Xinjie, Gaung Zeng, Edward C. Chang, and Hoi Y. Cheung. 2019. "What Are the Potential Predictors of Psychological Capital for Chinese Primary School Teachers?" *Frontiers in Education* 4. <https://doi.org/10.3389/educ.2019.00050>.
- Christie, Hazel, Moira Munro, and Tania Fisher. 2004. "Leaving university early: Exploring the differences between continuing and non-continuing students." *Studies in Higher Education* 29(5): 616–636. <https://doi.org/10.1080/0307507042000261580>.
- Council on Higher Education. 2018. *Higher Education Qualifications Sub-Framework: Qualification Standard for Doctoral Degrees*. Pretoria: CHE.
- Culbertson, S. S., C. J. Fullagar, and M. J. Mills. 2010. Feeling good and doing great: The relationship between psychological capital and well-being. *Journal of Occupational Health Psychology* 15(4): 421–433. <https://doi.org/10.1037/a0020720>.
- Datu, Jesus A. D. and Jana P. M. Valdez. 2016. "Psychological Capital Predicts Academic Engagement and Well-Being in Filipino High School Students." *The Asia-Pacific Education Researcher* 25: 399–405. <https://doi.org/10.1007/s40299-015-0254-1>.
- Datu, Jesus, A. D. 2018. "Flourishing is Associated with Higher Academic Achievement and Engagement in Filipino Undergraduate and High School Students." *Journal of Happiness Studies* 19: 27–39. <https://doi.org/10.1007/s10902-016-9805-2>.
- Datu, Alfonso A. D., Dennis M. McInerney, Magdalena Żemojtel-Piotrowska, Hidefumi Hitokoto, and Nino D. Datu. 2020. "Is Grittiness Next to Happiness? Examining the Association of Triarchic Model of Grit Dimensions with Well-Being Outcomes." *Journal of Happiness Studies*. <https://doi.org/10.1007/s10902-020-00260-6>.
- Diehl, Manfred, Elizabeth L. Hay, and Kathleen M. Berg. 2011. "The ratio between positive and negative affect and flourishing mental health across adulthood." *Aging & Mental Health* 15(7): 882–893. <https://doi.org/10.1080/13607863.2011.569488>.
- Doherty, William. 2006. "An analysis of multiple factors affecting retention in web-based community college courses." *The Internet and Higher Education* 9(4): 245–255.
- Duckworth, Angela L. and Martin E. P. Seligman. 2005. "Self-Discipline Outdoes IQ in Predicting Academic Performance of Adolescents." *Psychological Science* 16(12): 939–944. <https://doi.org/10.1111/j.1467-9280.2005.01641.x>.
- Duckworth, Angela L., Christopher Peterson, Michael D. Matthews, and Dennis R. Kelly. 2007. "Grit: Perseverance and passion for long-term goals." *Journal of Personality and Social Psychology* 92(6): 1087–1101. <https://doi.org/10.1037/0022-3514.92.6.1087>.
- Duckworth, Angela Lee, and Patrick D. Quinn. 2009. "Development and Validation of the Short Grit Scale (Grit-S)." *Journal of Personality Assessment* 91(2): 166–174. <https://doi.org/10.1080/00223890802634290>.
- Eldeleklioglu, Jale, Aynur Yilmaz, and Filiz Gültekin. 2010. "Investigation of teacher trainees' psychological well-being in terms of time management." *Procedia – Social and Behavioral*

- Sciences* 2(2): 342–348. <https://doi.org/10.1016/j.sbspro.2010.03.022>.
- Eskreis-Winkler, Lauren, Angela Lee Duckworth, Elizabeth P. Shulman, and Scott Beal. 2014. “The grit effect: Predicting retention in the military, the workplace, school and marriage.” *Frontiers in Psychology* 5(36). <https://doi.org/10.3389/fpsyg.2014.00036>.
- Farrington, Camille A., Melissa Roderick, Elaine Allensworth, Jenny Nagaoka, Tasha S. Keyes, David W. Johnson, and Nicole O. Beechum. 2012. “Teaching Adolescents to Become Learners: The Role of Noncognitive Factors in Shaping School Performance – A Critical Literature Review.” Chicago: ERIC. <https://ccsr.uchicago.edu/publications/teaching-adolescents-become-learners-role-noncognitive-factors-shaping-school>.
- Farruggia, Susan P., Cheon-woo Han, Lakeshia Watson, Thomas P. Moss, and Bette L. Bottoms. 2018. “Noncognitive Factors and College Student Success.” *Journal of College Student Retention: Research, Theory & Practice* 20(3): 308–327. <https://doi.org/10.1177/1521025116666539>.
- Finch, Jules, Lara J. Farrell, and Allison M. Waters. 2020. “Searching for the HERO in Youth: Does Psychological Capital (PsyCap) Predict Mental Health Symptoms and Subjective Wellbeing in Australian School-Aged Children and Adolescents?” *Child Psychiatry & Human Development* 51(6): 1025–1036. <https://doi.org/10.1007/s10578-020-01023-3>.
- Fong, Carlton J., Coreen W. Davis, Yughi Kim, Young W. Kim, Lauren Marriot, and SooYeon Kim. 2017. “Psychosocial Factors and Community College Student Success: A Meta-Analytic Investigation.” *Review of Educational Research* 87(2): 388–424. <https://doi.org/10.3102/0034654316653479>.
- French, Brian F., Jason C. Immekus, and William C. Oakes. 2005. “An examination of indicators of engineering students’ success and persistence.” *Journal of Engineering Education* 94(4): 419–425. <https://doi.org/10.1002/j.2168-9830.2005.tb00869.x>.
- Grissom, J. A., S. Lebb, and H. Mitani. 2015. “Principal time management skills: Explaining patterns in principals’ time use, job stress, and perceived effectiveness.” *Journal of Educational Administration* 53(6): 773–793. <https://doi.org/10.1108/JEA-09-2014-0117>.
- Hall, Ralph. 2010. “The work–study relationship: Experiences of full-time university students undertaking part-time employment.” *Journal of Education and Work* 23(5): 439–449. <https://doi.org/10.1080/13639080.2010.515969>.
- Hartmann, Monica E. and Roxanne Prichard. 2018. “Calculating the contribution of sleep problems to undergraduates’ academic success.” *Sleep Health* 4(5): 463–471. <https://doi.org/10.1016/j.sleh.2018.07.002>.
- Heckman, James J. and Yona Rubinstein. 2001. “The Importance of Noncognitive Skills: Lessons from the GED Testing Program.” *American Economic Review* 91(2): 145–149. doi:10.1257/aer.91.2.145.
- Howell, Andrew J. 2009. “Flourishing: Achievement-related correlates of students’ well-being.” *The Journal of Positive Psychology* 4(1): 1–13. <https://doi.org/10.1080/17439760802043459>.
- Karaś, Dominika, Jan Cieciuch, and Corey L. M. Keyes. 2014. “The Polish adaptation of the Mental Health Continuum-Short Form (MHC-SF).” *Personality and Individual Differences* 69: 104–109. <https://doi.org/10.1016/j.paid.2014.05.011>.
- Keyes, Corey L. M. 2002. “The mental health continuum: From languishing to flourishing in life.” *Journal of Health and Social Behaviour* 43(2): 207–222. <https://www.jstor.org/stable/3090197>.
- Keyes, Corey L. M. 2006. “Mental Health in Adolescence: Is America’s Youth Flourishing?” *American Journal of Orthopsychiatry* 76(3): 395–402. <https://doi.org/10.1037/0002-9432.76.3.395>.
- Keyes, Corey L. M., Marié Wissing, Johan P. Potgieter, Michael Temane, Annamari Kruger, and Sinette van Rooy. 2008. “Evaluation of the mental health continuum – short form (MHC-SF) in setswana-speaking South Africans.” *Clinical Psychology & Psychotherapy* 15(3): 181–192. <https://doi.org/10.1002/cpp.572>.
- Leppel, Karen. 2005. “College persistence and student attitudes toward financial success.” *College*

- Student Journal* 39(2): 223–242. (Accessed 23 January 2021).
- Lewis, Sarah. 2011. *Positive psychology at work: How positive leadership and appreciative inquiry create inspiring organizations*. Oxford, UK: John Wiley & Sons.
- Lobb, William B., Noel E. Wikin, David J. McCaffrey, Marvin C. Wilson, and John P. Bentley. 2006. “The Predictive Utility of Nontraditional Test Scores for First-Year Pharmacy Student Academic Performance.” *American Journal of Pharmaceutical Education* 70(6). <https://doi.org/10.5688/aj7006128>.
- Long, Michael, Fran Ferrier, and Margaret Heagney. 2006. “Stay, Play Or Give It Away? Students Continuing, Changing or Leaving University Study in First Year.” *Centre for the Economics of Education and Training, Monash University*. <https://files.eric.ed.gov/fulltext/ED505791.pdf>.
- Lucas, Gale M., Jonathan Gratch, Lin Cheng, and Stacy Marsella. 2015. “When the going gets tough: Grit predicts costly perseverance.” *Journal of Research in Personality* 59: 15–22. <https://doi.org/10.1016/j.jrp.2015.08.004>.
- Luthans, Brett C., Kyle W. Luthans, and James B. Avey. 2014. “Building the Leaders of Tomorrow: The Development of Academic Psychological Capital.” *Journal of Leadership and Organisational Studies* 21(2): 191–199. <https://doi.org/10.1177/1548051813517003>.
- Luthans, Brett C., Kyle W. Luthans, and Susan M. Jensen. 2012. “The Impact of Business School Students’ Psychological Capital on Academic Performance.” *Journal of Education for Business* 87(5): 253–259. <https://doi.org/10.1080/08832323.2011.609844>.
- Luthans, Fred and Carolyn M. Youssef. 2004. “Human, Social, and Now Positive Psychological Capital Management: Investing in People for Competitive Advantage.” *Organizational Dynamics* 33(2): 143–160. <https://doi.org/10.1016/j.orgdyn.2004.01.003>.
- Luthans, Fred, and Carolyn M. Youssef-Morgan. 2017. “Psychological Capital: An Evidence-Based Positive Approach.” *Annual Review of Organizational Psychology* 4: 339–366. <https://doi.org/10.1146/annurev-orgpsych-032516-113324>.
- Luthans, Kyle W., Brett C. Luthans, and Noel F. Palmer. 2016. “A positive approach to management education: The relationship between academic PsyCap and student engagement.” *Journal of Management Development* 35(9): 1098–1711. <https://doi.org/10.1108/JMD-06-2015-0091>.
- Luthans, Kyle W., Brett C. Luthans, and Daniel T. Chaffin. 2019. “Refining grit in academic performance: The mediational role of psychological capital.” *Journal of Management Education* 41(1): 35–61. <https://doi.org/10.1177/1052562918804282>.
- MacCann, Carolyn, Gerard J. Fogarty, and Richard D. Roberts. 2012. “Strategies for success in education: Time management is more important for part-time than full-time community college students.” *Learning and Individual Differences* 22(5): 618–623. <https://doi.org/10.1016/j.lindif.2011.09.015>.
- Manzano-Garcia, Guadalupe and Juan-Carlos Ayala. 2017. “Relationship between psychological capital and psychological well-being of direct support staff of specialist autism services. The mediator role of burnout.” *Frontiers in Psychology* 8(2277). <https://doi.org/10.3389/fpsyg.2017.02277>.
- Mason, H. D. 2018. “Grit and academic performance among first-year university students: A brief report.” *Journal of Psychology in Africa* 28(1): 66–68. <https://doi.org/10.1080/14330237.2017.1409478>.
- Mercan, Nuray. 2016. “Psychological capital research for relations with career adaptability.” *PressAcademia Procedia* 2(1): 434–442. <https://doi.org/10.17261/Pressacademia.2016118663>.
- Misra, Ranjita, and Michelle McKean. 2000. “College students’ academic stress and its relation to their anxiety, time management, and leisure satisfactio.” *American Journal of Health Studies* 16(1): 41–51.
- Nagaoka, Jenny, Camille A. Farrington, Melissa Roderick, Elaine Allensworth, Tasha Seneca Keyes, David W. Johnson, and Nicole O. Beechum. 2013. “Readiness for college: The role of noncognitive factors and context.” *Voices of Urban Education* 38: 45–52.
- Perkins-Gough, Deborah. 2013. “The significance of grit: A conversation with Angela Lee Duckworth.”



*Educational Leadership* 71(1): 14–20.

- Richardson, Michelle, Charles Abraham, and Rod Bond. 2012. "Psychological correlates of university students' academic performance: A systematic review and meta-analysis." *Psychological Bulletin* 138(2): 353–387. <https://doi.org/10.1037/a0026838>.
- Roemer, Anja, and Chantel Harris. 2018. "Perceived organisational support and well-being: The role of psychological capital as a mediator." *SA Journal of Industrial Psychology* 44(1): a1539. <https://doi.org/10.4102/sajip.v44i0.1539>.
- Rioli, Laura, Victor Savicki, and Joseph Richards. 2012. "Psychological capital as a buffer to student stress." *Psychology* 3(12A): 1202–1207. <https://doi.org/10.4236/psych.2012.312A178>.
- Sansgiry, Sujit S., Monali Bhosle, and Kavita Sail. 2006. "Factors that affect academic performance among pharmacy students." *American Journal of Pharmaceutical Education* 70(5): Article 104. <https://doi.org/10.5688/aj7005104>.
- Seligman, Martin E. P. 2011. *Flourish: A Visionary New Understanding of Happiness and Well-being*. New York: Free Press.
- Setar, Sarah B., Johanna H. Buitendach, and Herbert Kanengoni. 2015. "The moderating role of psychological capital in the relationship between job stress and the outcomes of incivility and job involvement amongst call centre employees." *SA Journal of Industrial Psychology* 14(1): 1–13. <http://dx.doi.org/10.4102/sajip.v41i1.1183>.
- Tracey, Terence J. G. and Steven B. Robbins. 2006. "The interest–major congruence and college success relation: A longitudinal study." *Journal of Vocational Behavior* 69(1): 64–89. <https://doi.org/10.1016/j.jvb.2005.11.003>.
- Urban, B. and P. Richard. 2015. "Perseverance among university students as an indicator of entrepreneurial intent." *South African Journal of Higher Education* 29(5): 263–278. <https://journals.co.za/doi/pdf/10.10520/EJC182506>.
- Van Zyl, Llewellyn Ellardus and Sabastiaan Rothmann. 2012. "Flourishing of students in a tertiary education institution in South Africa." *Journal of Psychology in Africa* 22(4): 593–604. <https://doi.org/10.1080/14330237.2012.10820573>.
- Wintre, Maxine G., Barry Dilouya, Mark S. Pancer, Michael W. Pratt, Shelly Birnie-Lefcovitch, and Gerald Adams. 2011. "Academic achievement in first-year university: Who maintains their high school average?" *Higher Education* 62: 467–481. <https://doi.org/10.1007/s10734-010-9399-2>.
- Wintre, Maxine G., Colleen Bowers, Nicole Gordner, and Liora Lange. 2006. "Re-evaluating the university attrition statistic: A longitudinal follow-up study." *Journal of Adolescent Research* 21(2): 111–132. doi:10.1177/0743558405285658.
- Wudu, Melese and Fenta Getahun. 2009. Trend and causes of female students' dropout from teacher education institutions of Ethiopia: The case of Jimma university. *Ethiopia Journal of Education and Science* 5(1): 10.4314/ejesc.v5i1.56309.
- Yorke, Mantz. 2000. "The quality of the student experience: What can institutions learn from data relating to non-completion?" *Quality in Higher Education* 6(1): 61–75. <https://doi.org/10.1080/13538320050001072>.
- You, J. W., B. Kim, and M. Kang. 2014. "The effects of psychological capital on self-directed learning and learning engagement for college students." *Journal of Learner-Centered Curriculum and Instruction* 14(3): 45–70.
- You, Ji Won. 2016. "The relationship among college students' psychological capital, learning empowerment, and engagement." *Learning and Individual Differences* 49: 17–24. <https://doi.org/10.1016/j.lindif.2016.05.001>.
- Youssef-Morgan, Carolyn M. and Fred Luthans. 2015. "Psychological capital and well-being." *Stress and Health: Journal of the International Society for the Investigation of Stress* 31(3): 180–188. <https://doi.org/10.1002/smi.2623>.
- Zhang, Meng Xuan, Ngai Lam Mou, Kwok Kit Tong, and Anise M. S. Wu. 2018. "Investigation of the effects of purpose in life, grit, gratitude, and school belonging on mental distress among Chinese

emerging adults.” *International Journal of Environment Research and Public Health* 15(10): 2147. <https://doi.org/10.3390/ijerph15102147>.

Ziddy, I. 2007. *Challenges facing the implementation of a policy on girls' education in Zanzibar*. South Africa: Country Lodge.