

**Exploring the Antecedents and Outcomes of Work-Study Conflict and Work-Study
Facilitation in Working University Students: An Australian Perspective**

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Table of Contents

List of Tables..... 4

List of Figures..... 5

Abstract..... 6

Declaration..... 7

Acknowledgements 8

1. Introduction 9

1.1 Role Theory..... 10

1.2 Antecedents of Work-Study Conflict and Work-Study Facilitation 12

 1.2.1 Job Characteristics 12

 1.2.2 Personality 16

1.3 Outcomes of Work-Study Conflict and Work-Study Facilitation..... 19

 1.3.1 Academic Outcomes..... 19

 1.3.2 Health Outcomes 20

 1.3.3 Work Outcomes 21

2. Method..... 23

2.1 Participants 23

2.2 Materials 23

2.3 Demographic Measures..... 23

2.4 Psychological Measures..... 24

 2.4.1 Personality 24

 2.4.2 Job Demands..... 25

 2.4.3 Job Resources..... 25

 2.4.4 Work-Study Conflict (WSC)..... 26

 2.4.5 Work-Study Facilitation (WSF) 26

 2.4.6 Academic Outcomes..... 27

 2.4.7 Psychological Health Outcomes..... 28

 2.4.8 Work Outcomes 29

2.5 Procedure 29

3. Results 31

3.1 Data Screening..... 31

3.2 Power Analysis..... 31

3.3 Assumptions of Correlational and Multiple Linear Regression Analyses..... 31

3.4 Description of Participants..... 32

3.5 Descriptive Statistics..... 34

3.6 Antecedents of Work-Study Conflict and Work-Study Facilitation..... 37

3.7 Outcomes of Work-Study Conflict and Work-Study Facilitation 39

4. Discussion 43

4.1 Antecedents of Work-Study Conflict and Work-Study Facilitation 43

4.2 Outcomes of Work-Study Conflict and Work-Study Facilitation 44

4.3 Evaluation of the Current Study..... 47

 4.3.1 Limitations47

 4.3.2 Strengths48

 4.3.3 Practical Implications.....49

4.2 Research Directions 50

4.3 Conclusions 50

References 52

Appendix A: Online Questionnaire 59

Appendix B: Promotional Poster..... 87

List of Tables

Table 1 *Types of Interrole Conflict (Greenhaus & Beutell, 1985)*..... 11

Table 2 *Operational Effects of Interrole Facilitation (Greenhaus & Powell, 2006)*..... 12

Table 3 *Summary of the Big 5 Personality Dimensions with Key Characteristics (Costa & McCrae, 1992)*..... 16

Table 4 *Example Items and Previous and Current Cronbach’s Alpha for Each Dimension in the International Personality Item Pool (IPIP) 50-item Inventory (Goldberg, 1992)*..... 25

Table 5 *Example Items and Previous and Current Cronbach’s Alpha for Each Dimension in the School Readiness Scale (Markel & Frone, 1998)*..... 27

Table 6 *Demographic Information of the Sample* 33

Table 7 *Descriptive Statistics of Demographic Variables, WSC, WSF, Antecedents and Outcome Variables* ... 35

Table 8 *Spearman’s Correlation with Cronbach’s Alpha on the Diagonal*..... 36

Table 9 *Results of Stepwise Multiple Linear Regression to Predict WSC and WSF with Job Characteristics and Personality*..... 39

Table 10 *Results of Simple Linear Regression to Predict Outcome Variables*..... 42

List of Figures

Figure 1: *Health Impairment and Motivational Processes in the JD-R Model (Schaufeli, 2017)*..... 14

Abstract

Australian university students face significant financial challenges and many are engaging in employment to support themselves. The interaction between the roles of both student and worker were explored within a cross-sectional study of 331 working university students. Antecedents and outcomes of both work-study conflict and work-study facilitation were researched from the resource scarcity and resource expansion perspective of role theory. The study aimed to build on existing literature by considering the role of personality as an antecedent to these constructs, recognizing work-study conflict and work-study facilitation as bidirectional constructs and considering the impact of these on multiple outcome domains from the same sample. Results indicated that job characteristics played a greater role than personality in predicting work-study conflict and work-study facilitation, with high levels of job demands and work hours predicting more work-study conflict. In contrast, a greater level of job control and job-study congruence predicted higher levels of work-study facilitation. High levels of work-study conflict were found to significantly predict reduced academic, health and work outcomes. High levels of work-study facilitation were found to have a far more positive impact on these outcomes. Implications of these findings, along with suggestions for future research, are also discussed.

Declaration

This thesis contains no material which has been accepted for the award of any other degree or diploma in any University, and, to the best of my knowledge, this thesis contains no material previously published except where due reference is made. I give permission for the digital version of this thesis to be made available on the web, via the University of Adelaide's digital thesis repository, the Library Search and through web search engines, unless permission has been granted by the School to restrict access for a period of time.

Signed

Benjamin William Kropf

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1. Introduction

Working while studying at university has become the norm rather than the exception. The complex interplay between the two domains has implications for the individual student, universities, employers and the broader economy. In Australia, 82% of domestic, undergraduate students are simultaneously engaged in paid employment (Universities Australia, 2018). Full-time domestic undergraduates are working, on average, 12 hours per week, however, at least 40% of these students are working more than 20 hours per week (Universities Australia, 2018). Approximately 65% of these students have reported that they do not believe their work-study balance is satisfactory and 41% believe that their work has a negative impact on their studies (Universities Australia, 2018).

Previous research has explored the role of two psychological phenomena, *work-study conflict* (WSC) and *work-study facilitation* (WSF). WSC refers to the extent to which work interferes with a student's ability to meet study-related demands and responsibilities (Markel & Frone, 1998). In contrast, WSF is defined as the improvement of the quality of the study role resulting from participation in work (Butler, 2007). WSC and WSF have been found to be products of the student's job characteristics (Butler, 2007; Markel & Frone, 1998) and have been found to predict a range of academic (Butler, 2007; Markel & Frone, 1998), health (Cinamon, 2016; Adebayo, Sunmola & Udegbe, 2008) and work outcomes (Laughman, Boyd & Rusbasan, 2016; Wyland, Lester, Ehrhardt & Standifer, 2016). The two phenomena do not normally co-occur (Butler, 2007).

The literature in this area has a number of key limitations: (1) previous models, including the only Australian model, have failed to recognize the role of WSF (Lingard, 2007; Markel & Frone, 1998); (2) previous models have concentrated on one or two outcome areas only (academic OR health OR work) (Markel & Frone, 1998; Lingard, 2007; Butler, 2007; Cinamon, 2016; Wyland et al., 2016; Owen, Kavanagh & Dollard, 2018), ignoring the complex interplay between multiple domains in students' lives; (3) measures of WSC and WSF have failed to take into account the bidirectional

nature of these constructs (study can interfere with work just as work can interfere with study) (Butler, 2007; Markel & Frone, 1998); and (4) an exclusive focus on work or study characteristics in predicting WSC and WSF without considering the role of individual differences (Wyland et al., 2016; Cinamon, 2016; Butler, 2007; Lingard, 2007; Markel & Frone, 1998).

The present study aims to build on these limitations and add to the existing literature by testing an expanded model that: a) tests the predictive relationship between personality and WSC and WSF; and b) measures the impact of WSC and WSF on three core outcome types from the same sample. It aims to achieve this by administering a questionnaire with measures of personality, job characteristics, WSC, WSF, burnout, engagement and other outcome variables to a sample of working students. The study aims to contribute to the understanding of the operation of WSC and WSF by identifying relevant antecedents and clear outcomes of these constructs.

1.1 Role Theory

Role theory provides a conceptual framework for understanding how people attempt to manage the many roles in their life (Kahn, Wolfe, Quinn, Snoek & Rosenthal, 1964). These roles carry with them a number of duties, responsibilities, rules and generally expected behaviour patterns (Adebayo, 2006). Within this theory, there are two main schools of thought as to how multiple roles influence and affect the individual: *resource scarcity* and *resource expansion*.

The *resource scarcity* perspective adopts a depletion model, on the basis that human resources (eg; energy, skills, perspectives, physical and psychological resources) are finite and that the individual must choose how to spend these (Kopelman, Greenhaus & Connolly, 1983; Kahn et al., 1964). Engaging in multiple roles, can create a set of opposing, incompatible pressures by requiring different roles to compete for a person's limited resources (Kopelman et al., 1983). Engaging in these multiple, incompatible roles (eg; worker and parent) can result in interrole conflict (Chapman,

Ingersoll-Dayton & Neal, 1994; Hammer, Allen & Grigsby, 1997). *Interrole conflict* refers to the simultaneous occurrence of two (or more) sets of pressures, such that compliance with one would make compliance with the other more difficult (Kahn et al., 1964). WSC is a specific type of interrole conflict which can be subdivided into three key types as outlined in Table 1.

Table 1

Types of Interrole Conflict (Greenhaus & Bentell, 1985)

Type of Conflict	Definition	Example
<i>Time-Based Conflict</i>	Multiple roles compete for an individual's limited time resources	Work demands prevent a parent from being able to assist their child with homework
<i>Strain-Based Conflict</i>	Stressors generated in one role are transferred to the second role and make it difficult to fulfil the requirements of that role	Anxiety and irritability generated at work may make it difficult to focus and complete university tasks
<i>Behaviour-Based Conflict</i>	Behaviours which are functional in one role, are inappropriately applied in another, making it difficult to comply with requirements of that role	A managerial and authoritarian character at work may be inappropriately applied to the family context where a more emotional and warm character is required

The *resource expansion* perspective proposes that human resources are not finite and participation in multiple roles is beneficial to the individual (Marks, 1977; Goode, 1960). Marks (1977) argues that human energy expenditure can be controlled and that humans have ample energy for all energy expenditures, noting that energy can be “found” for a task to which we are highly committed. This perspective is based on the idea that resources from one role can be used or exploited within another domain leading to interrole facilitation (Greenhaus & Powell, 2006). *Interrole facilitation* is defined as the extent to which experiences in one role improve the quality of life

in the other role (Greenhaus & Powell, 2006). WSF is a specific type of interrole facilitation which can occur in three main ways as outlined in Table 2.

Table 2

Operational Effects of Interrole Facilitation (Greenhaus & Powell, 2006)

Type of Effect	Definition	Example
<i>Additive Effect</i>	Experiences in separate domains can have additive effects on overall physical and psychological wellbeing	Satisfaction with both work and family have been found to have additive effects on life satisfaction and perceived quality of life (Rice, Frone & McFarlin, 1992)
<i>Buffering Effect</i>	Positive experiences in one domain can buffer the effect of distress stemming from another domain	High quality work experiences have been found to moderate the relationship between family stressors and well-being (Barnett, Marshall & Sayer, 1992)
<i>Transfer Effect</i>	Resources generated from experience in one role, can be transferred to another role to produce positive experiences and outcomes	Self-confidence generated in the personal domain can enhance work performance (Ruderman, Ohlott, Panzer & King, 2002).

1.2 Antecedents of Work-Study Conflict and Work-Study Facilitation

1.2.1 Job Characteristics

Research on WSC and WSF has largely used the Job Demands-Resources Theory (JD-R) (Demerouti, Bakker, Nachreiner & Schaufeli, 2001) to model and measure the impact of a student’s job characteristics on other domains. JD-R was developed to be an overarching theory of work-stress that can be applied to every occupation (Demerouti et al., 2001). This makes it well-suited to the broad range of occupations that students have. A recent meta-analytic review of 74 longitudinal studies, confirmed the essential assumptions of the theory (detailed below) (Lesener, Gusy &

Wolter, 2019). JD-R theory proposes that work conditions can be characterized by 2 broad categories: job demands and job resources (Demerouti et al., 2001).

Job demands refer to those physical, psychological, social or organizational aspects of the job that require sustained physical and/or psychological effort and are therefore associated with certain physiological and/or psychological costs (Demerouti et al., 2001). On the other hand, *job resources* refer to those physical, psychological, social or organizational aspects of the job that are functional in achieving work goals, reduce job demands and the associated physiological and psychological costs, or stimulate personal growth, learning and development (Bakker, 2011; Bakker & Demerouti, 2007).

The JD-R model outlines how these two categories instigate two key psychological processes in the development of burnout and engagement. These can be seen in Figure 1. *Burnout* is defined as a psychological syndrome in response to chronic interpersonal stressors, comprising of high levels of overwhelming exhaustion, feelings of cynicism and reduced professional efficacy (a sense of ineffectiveness and lack of accomplishment) (Maslach, Leiter & Schaufeli, 2008). *Engagement* is often considered to be the opposite of burnout and is defined as a positive, fulfilling and work-related state of mind that is characterized by vigour, dedication and absorption (Schaufeli, Salanova, Gonzalez-Roma & Bakker, 2002a).

The health impairment process proposes that poorly designed jobs with significant job demands and low job resources, exhaust an individual's mental and physical resources, deplete their energy to a state of exhaustion and result in increased health problems (Demerouti et al., 2001). This process occurs as a result of the strong, statistical relationship between job demands and burnout. High job demands have repeatedly been found to be a unique predictor of the exhaustion and cynicism components of burnout (Bakker & Demerouti, 2017; Hakanen, Schaufeli & Ahola, 2008; Bakker, Demerouti & Euwema, 2005; Schaufeli & Bakker, 2004; Bakker, Demerouti, de Boer

& Schaufeli, 2003; Demerouti et al., 2001). Over time, this relationship has also been found to predict the development of depression (Hakanen et al., 2008).

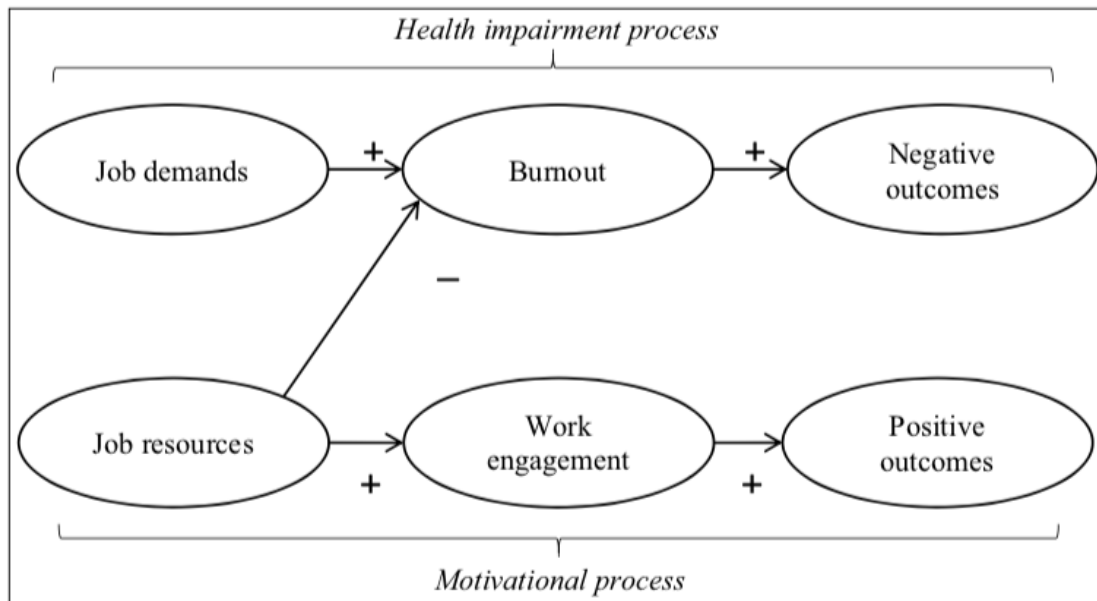


Figure 1: *Health Impairment and Motivational Processes in the JD-R Model (Schaufeli, 2017)*

The motivational process is based upon the strong statistical relationship between job resources and engagement (Schaufeli & Bakker, 2004; Demerouti et al., 2001). A lack of job resources, has been reported to lead to disengagement and burnout (Bakker et al., 2005; Schaufeli & Bakker, 2004; Demerouti et al., 2001) In contrast, an employee who can draw on a high level of job resources (e.g. job control, participation in decision making) is likely to be more engaged with their job and motivated to do it (Bakker, van Veldhoven & Xanthopoulou, 2010; Schaufeli & Bakker, 2004) feel a stronger level of commitment to their employer and be less absent from the workplace (Hakanen et al., 2008; Bakker et al., 2003).

The role of JD-R theory has been well-documented in studies examining the occurrence of WSC and WSF. Previous research has suggested that a high level of job demands are related to a high levels of WSC, including job demands such as workload (Wyland et al., 2016; Adebayo, 2006;

Markel & Frone, 1998), number of hours worked (Cinamon, 2016; Dundes & Marx, 2007; Butler, 2007; Markel & Frone, 1998) and psychological demands (Butler, 2007). This is consistent with the resource scarcity perspective; as demands from work increase, students experience a greater level of time-based and strain-based conflict with their studies due to the reduced number of resources they have remaining to invest in their studies.

Other research has found a positive relationship between job resources and WSF. In particular, this has included job resources such as job control (Wyland et al., 2016; Butler, 2007) and job-study congruence (Butler, 2007). *Job-study congruence* (JSC) exists when job requirements and university learning are complementary, such that the job requires knowledge or skills acquired at university (Butler, 2007). Job resources promote personal growth, learning and development (Owen et al., 2018) as the individual has the necessary tools to meet the demands of their job to a personally fulfilling standard. A high level of job control is likely to lead to greater levels of WSF, as job control has previously been found to generate the psychological resources of responsibility (transfer effect) (Hackman & Oldham, 1976) and more positive emotions (additive and/or buffering effect) (Williams & Alliger, 1994). Similarly, a high level of JSC is likely to generate skill and perspective resources that can be applied to the study domain (Greenhaus & Powell, 2006) (transfer effect). These are both key examples of WSF that are consistent with the resource expansion perspective of role theory. On the basis of the research reviewed above, it is hypothesized that;

Hypothesis 1a: A high level of job demands and work hours will predict a high level of WSC

Hypothesis 1b: A high level of job resources (job control and job-study congruence) will predict a high level of WSF

1.2.2 Personality

The role of personality as an individual differences’ antecedent of both WSC and WSF has not been explored in the work-study research. However, it has been explored in the work-family literature with the similar constructs of work-family conflict (WFC) and facilitation (WFF). Given that these constructs are based on the same two schools of thought, it is argued that their operation and the relevance of personality, is likely to be similar.

The ‘Big 5’ structure is the most commonly used theory of personality in the psychological literature. The key dimensions of extraversion, neuroticism (emotional stability), agreeableness, openness (to experience) and conscientiousness (Costa & McCrae, 1992, 1995; Goldberg, 1995) have been found to be stable and enduring characteristics of the individual (Costa & McCrae, 1995; Hofstede, Neujin, Daval & Sanders, 1990). It is argued that this makes them suitable constructs to determine individual differences in interrole conflict and facilitation. A summary of each of the dimensions can be seen in Table 3.

Table 3

Summary of the Big 5 Personality Dimensions with Key Characteristics (Costa & McCrae, 1992)

Dimension	Characteristics of those Low on this Dimension (Costa & McCrae, 1992)	Characteristics of those High on this Dimension (Costa & McCrae, 1992)
Extraversion	Reserved, independent, quiet	Outgoing, sociable, assertive
Neuroticism	Emotionally stable, relaxed, calm	Emotionally unstable, worrisome, tense, self-conscious
Agreeableness	Ego-centric, competitive, skeptical of others	Sympathetic, helpful, good-natured
Openness to Experience	Preference for familiarity, conservative and conventional behavior	Imaginative, creative, preference for variety
Conscientiousness	Careless, aimless, disorganized	Determined, reliable and organized

Extraversion assesses the quantity and intensity of interpersonal interaction and activity (Pervin, 1996). Previous findings on the relationship between extraversion and WFC have been mixed (Paulson & Leuty, 2016; Wayne, Musisca & Fleeson, 2004). However, in a recent meta-analysis, Allen et al., (2012) reported a significant, negative relationship between extraversion and WFC with a small effect size. It is argued that in the work-study domain, a negative relationship between extraversion and WSC will also be found. Due to the sociable and assertive nature of extraverts, those higher on this trait are more likely to engage in proactive behaviours to negotiate their job demands and work arrangements so that the student is better able to fulfil the demands of their study role. While these behaviours may not always result in this outcome, it is argued that when it does, this reduces the time and strain-based conflict between the work and study domains. Previous research examining the relationship between extraversion and WFF has revealed a significant, positive relationship (Wayne et al., 2004). It is argued that this relationship occurs due to the increased positive affect and energy experienced by extroverts (Allen et al., 2012, Bruck & Allen, 2003; Watson, Clark & Tellegen, 1988). This provides them with the additional resources to cope with or buffer the effect of conflict and transfer energy across domains (Wayne et al., 2004).

The neuroticism dimension assesses an individual's level of emotional stability (Costa & McCrae, 1992). Previous research has found a positive relationship between neuroticism and WFC, with small to medium effect sizes being reported (Wille et al., 2013; Allen et al., 2012; Bruck & Allen, 2003). In contrast, a significant negative relationship between neuroticism and WFF has been found (Rantanen, Pulkkinen & Kinnunen, 2005; Wayne et al., 2004). It is argued that those high on neuroticism are likely to experience more WSC as they are inclined to be more anxious, tense and worried. While this arguably predisposes them to strain-based conflict, they are also more likely to become preoccupied with the worries of their role demands, reducing their efficient use of time and increasing their stress as demands from the different roles compete for their time (time-based

conflict) (Wayne et al., 2004). For these same reasons, those low on neuroticism and experiencing more emotional stability are likely to experience higher levels of WSF.

Agreeableness assesses an individual's interpersonal tendencies (Costa & McCrae, 1992). Previous research has found that higher levels of agreeableness are related to reduced levels of WFC with small effect sizes (Wille et al., 2013; Rantanen et al., 2005; Wayne et al., 2004; Bruck & Allen, 2003) whilst higher levels of agreeableness have been found to be associated with higher levels of WFF but not family-work facilitation (Wayne et al., 2004). Those high on agreeableness have the necessary traits to minimize the potential for conflict between multiple roles and develop positive work relationships. Both of these factors reduce the potential for strain-based conflict and may foster a sense of transferrable engagement (Wayne et al., 2004).

Openness to experience assesses the individual's scope for creativity, curiosity and intellect (Costa & McCrae, 1992). Wayne et al. (2004) found no relationship between openness and conflict, but reported a significant, positive relationship between openness to experience and WFF. It is argued that those high in openness will be more accepting of change and are likely to develop creative solutions to manage conflict across domains. Due to their preference for variety, those high on this trait are also more likely to be willing to transfer new skills and behaviours across domains (transfer effect) (Wayne et al., 2004).

Conscientiousness assesses individual differences in planning, organizing and carrying out tasks (Costa & McCrae, 1992). Previous research has reported a significant, negative relationship between conscientiousness and both WFC and family-work conflict (Rantanen et al., 2005; Wayne et al., 2004). In contrast, a positive relationship between conscientiousness and family-work facilitation has been established (Wayne et al., 2004). The ability of the highly conscientious individual to efficiently and effectively plan and carry out tasks, allows them to accomplish more in an available time frame, ultimately reducing the potential for time-based conflict (Wayne et al., 2004). They are

also more likely to successfully complete tasks, providing them with a sense of accomplishment, positive mood and self-esteem, which can be transferred across to other domains (Wayne et al., 2004).

In light of the current literature and arguments made, it is hypothesized that;

Hypothesis 2a: Higher levels of extraversion, openness to experience and conscientiousness will predict lower levels of WSC. Higher levels of neuroticism and agreeableness will predict higher levels of WSC.

Hypothesis 2b: Higher levels of extraversion, openness to experience and conscientiousness will predict higher levels of WSF. Higher levels of neuroticism and agreeableness will predict lower levels of WSC.

1.3 Outcomes of Work-Study Conflict and Work-Study Facilitation

1.3.1 Academic Outcomes

The impact of WSC and WSF on academic outcomes has been widely considered. Previous research has found higher levels of WSC to be associated with reduced academic performance (Benner & Curl, 2018; Cinamon, 2016; Butler, 2007), reduced intention to consider further study (Cinamon, 2016), increased negative feelings about university, reduced university satisfaction (Creed, French & Hood, 2014) and reduced study readiness (effort, attendance and preparation) (Markel & Frone, 1998). While the research on WSF is not as abundant, previous research has reported it to have a positive impact on academic outcomes. These include increased academic performance (Cinamon, 2016; Butler, 2007), academic planning (Cinamon, 2016) and engagement (Creed et al., 2014).

In accordance with the resource scarcity perspective, a working student who experiences significant job demands and works a significant number of hours, is likely to have their personal resources depleted and experience higher levels of WSC. As a result of having fewer time resources to invest in their studies, the student is unable to put in the required effort for their course, prepare for and attend the relevant classes. This is likely to lead to decreased academic performance, creating a sense of frustration and dissatisfaction with their university experience. Conversely, a student experiencing higher levels of WSF from resources generated in their work, are more likely to be able to fulfil the demands of their study role, resulting in improved academic performance, satisfaction, study readiness and a greater sense of engagement. It is hypothesized that;

Hypothesis 3a: Higher levels of WSC will result in reduced study satisfaction, study readiness and engagement

Hypothesis 3b: Higher levels of WSF will result in increased study satisfaction, study readiness and engagement

1.3.2 Health Outcomes

The impact of WSC and WSF on student health has also been examined. Higher levels of WSC have been found to be associated with reduced psychological well-being (Park & Sprung, 2013; Adebayo et al., 2008), increased depression scores (Cinamon, 2016), increased tiredness (Broadbridge & Swanson, 2006), increased burnout (Laughman, et al., 2016) and reduced professional efficacy (Lingard, 2007). In contrast, higher levels of WSF have been found to be associated with greater psychological well-being, engagement (Creed et al., 2014) and increased life satisfaction (Cinamon, 2016). In a qualitative study conducted by Broadbridge & Swanson (2006)

working students in a number of focus groups reported that working was a positive experience as it provided them with a mental ‘escape’ from study, highlighting the sense of responsibility and social aspects of the job as beneficial features.

These findings make sense in the context of both the health impairment process in JD-R theory (Demerouti et al., 2001) and also the resource scarcity perspective. When job and/or study demands are high with low resources to buffer the impact of these demands, the individual’s personal resources are depleted to a state of exhaustion whereby the individual no longer has the resources to ‘cope’ with the role conflict. In this state of exhaustion, increased health problems have been found to develop, notably burnout (Bakker & Demerouti, 2017; Demerouti et al., 2001) and depression (Hakanen et al., 2008). In light of these findings, it is hypothesized that;

Hypothesis 4a: Higher levels of WSC will result in higher levels of burnout and lower levels of subjective psychological wellbeing

Hypothesis 4b: Higher levels of WSF will result in lower levels of burnout and higher levels of subjective psychological wellbeing

1.3.3 Work Outcomes

Literature on the impact of WSC and WSF on work outcomes has not been extensively explored. Higher levels of WSC have been found to be related to higher levels of turnover intention, however, lower levels of job satisfaction (Laughman et al., 2016). This negative relationship with job satisfaction has also been well-documented in research on Work-Family Conflict (Nohe & Sonntag, 2014; Haar, Roche & Taylor, 2012; Zhang, Griffeth & Fried, 2012). Higher levels of WSF have been found to be related to higher levels of job satisfaction (Wyland et

al., 2016). There has been no previous research exploring the relationship between WSF and turnover intention. However, this relationship may be explained with the motivational pathway in JD-R theory (Demerouti et al., 2001). WSF has a well-documented, positive relationship with job resources (Wyland et al., 2016; Butler, 2007) and employees who can draw on a high level of job resources are likely to be more engaged with their job (Bakker et al., 2010; Schaufeli & Bakker, 2004) and feel a stronger level of commitment to their employer (Hakanen et al., 2008; Bakker et al., 2003). Within the context of working students, those experiencing high levels of WSF are likely doing so because they have access to a high number of job resources in their role. This activates the motivational pathway which has been found to increase an employee's level of commitment to their employer (Hakanen et al., 2008; Bakker et al., 2003). On this basis, it is hypothesized that;

Hypothesis 5a: Higher levels of WSC will result in higher levels of turnover intention and reduced job satisfaction

Hypothesis 5b: Higher levels of WSF will result in lower levels of turnover intention and increased job satisfaction

2. Method

2.1 Participants

The research program was open to any individual who, at the time of completing the survey, was: (a) engaged in a tertiary study program at any-level, on any-basis; and (b) engaged in some form of paid employment during the university semester, on any-basis. Participants were asked to indicate whether or not they met both criteria prior to completing the study (e.g. are you currently completing a university program at any level?). Participants who answered 'no' to either question were disqualified from participation.

2.2 Materials

An online questionnaire was developed through SurveyMonkey to facilitate data collection. The questionnaire (Appendix A) included demographic measures as well as measures of personality, job demands, job resources, work-study conflict, work-study facilitation, health outcomes, academic outcomes and work outcomes.

2.3 Demographic Measures

Participants were asked a range of questions about their work and study domains. This included their age, employment status, number of jobs held, average number of work hours per week, primary reason for working, industry in which they work, average number of hours at university per week, average number of hours spent on university work per week, university attended, discipline of study, enrolment status, degree level and degree progress.

2.4 Psychological Measures

All scales can be seen in Appendix A. Scales were measured on a Likert scale of 1 (very inaccurate/strongly disagree) to 5 (very accurate/strongly agree) unless otherwise indicated. On all scales, items were summed together to provide a single score for each construct. Items were scored so that higher scores indicated greater levels of the named construct. Cronbach's Alpha (α) was used to measure internal-consistency reliability.

2.4.1 Personality

Personality was measured using the International Personality Item Pool (IPIP) 50-item inventory (Goldberg et al. 2006; Goldberg, 1992). The IPIP is a public-domain personality measure which assesses personality on the basis of the Big-5 Factor Structure developed by Costa & McCrae (1992). It assessed the key personality dimensions of extraversion, agreeableness, conscientiousness, neuroticism and openness. Example items are shown in Table 4. Some items on each trait were reverse scored as outlined by Goldberg et al., (2006). Item scores were summed together to produce a total score on each dimension for each participant. Internal consistency reliability has previously been reported as high for each dimension. This can be seen in Table 4.

Table 4

Example Items and Previous and Current Cronbach's Alpha for Each Dimension in the International Personality Item Pool (IPIP) 50-item Inventory (Goldberg, 1992)

Dimension	Example Item	Cronbach's Alpha (α) (Goldberg, 1992)	Cronbach's Alpha (α) Present Study
Extraversion	I am the life of the party	.87	.90
Agreeableness	I am interested in people	.82	.83
Conscientiousness	I am always prepared	.79	.78
Neuroticism	I am relaxed most of the time	.86	.87
Openness	I have a rich vocabulary	.84	.77

2.4.2 Job Demands

Job demands were measured using the 6-item Job Demands Scale (Karasek, 1979) as used by Butler (2007). Items measured work quantity (eg; to what extent does your job require a great deal of work to be done?), time constraints (eg; to what extent is their enough time for you to do your job) and conflict between work tasks (eg; to what extent are you faced with conflicting demands on your job?). Butler (2007) previously reported a high level of internal consistency reliability for this scale ($\alpha = 0.81$) and in this study it was $\alpha = 0.86$.

2.4.3 Job Resources

Job resources were measured across two constructs; job control and job-study congruence. *Job control* was measured by combining the 6-Item Skill Discretion Scale (Karasek, 1979) and 3-Item Decision Authority Scale (Karasek, 1979) to create a single 9-Item Scale for Job Control. Items measured occupational autonomy over decision making, opportunities for individual skill

development and task/skill variety at work. The scale had a high level of internal consistency with $\alpha = 0.85$.

Job-study congruence was measured using the 3-Item scale developed by Butler (2007), who reported a high level of internal consistency reliability for this scale ($\alpha = 0.87$). In this study it was $\alpha = 0.92$.

2.4.4 Work-Study Conflict

WSC was measured with a single scale which aimed to capture both directions of the relationship (e.g. work conflicting with study, study conflicting with work). This scale was composed of the 5-item Work-School Conflict Scale (Markel & Frone, 1998) and an adapted version of the 4-item Family Interference With Work Scale (Gutek, Searle & Klera, 1991). Items in the Family Interference With Work Scale (Gutek et al., 1991) were amended to change references of 'family' to 'study' (eg; I'm often too tired at work because of the things I have to do at home (changed to 'university'). This approach was developed and tested by Cinamon (2016). The scale had a high level of internal consistency reliability with $\alpha = 0.85$.

2.4.5 Work-Study Facilitation

Similarly, WSF was measured with a single scale which aimed to capture both directions of the relationship (eg; work facilitating study, study facilitating work). This scale comprised of the 5-Item Work-School Facilitation Scale (Butler, 2007), an adapted version of Wayne, Randel & Steven's (2006) 3-Item Work-Family Facilitation Scale and 2 items from the shortened version of the Family-Work Enrichment Scale (Kacmar, Crawford, Carlson, Ferguson & Whitten, 2014). Items from the Work-Family Facilitation Scale and the Family-Work Enrichment Scale were amended to change references of 'family' to 'study' (eg; Having a good day at work, makes me a better family member

(changed to student)). This approach was developed and tested by Cinamon (2016). The scale had a high level of internal consistency reliability with $\alpha = 0.87$.

2.4.6 Academic Outcomes

A range of academic outcomes were measured as part of the study. *Study satisfaction* was measured with the School Satisfaction scale developed by Butler (2007). The items reflect satisfaction with being a student, their educational experience and with their university in general. Butler (2007) had previously reported a high level of internal consistency reliability for this scale ($\alpha = 0.95$) and in this study it was $\alpha = 0.90$.

Study effort, study preparation and study attendance were all measured with the School Readiness Scale (Markel & Frone, 1998). The scale contains 13 items, of which four assess effort, four assess preparation and five assess attendance. Examples of these can be in Table 5. Some items on the scale were reverse scored as outlined by Markel & Frone (1998). A score for each dimension was calculated.

Table 5

Example Items and Previous and Current Cronbach’s Alpha for Each Dimension in the School Readiness Scale (Markel & Frone, 1998)

Dimension	Example Item	Cronbach’s Alpha (α) (Markel & Frone, 1998)	Cronbach’s Alpha (α) Present Study
Study Effort	Put forth a high level of effort in class	0.73	0.77
Study Preparation	Completed assigned homework/preparation in time	0.72	0.77
Study Attendance	Skipped a whole day of university without a real excuse	0.81	0.87

Study engagement was measured with the Utrecht Work Engagement Scale for Students (UWES-SS) (Schaufeli et al., 2002). The scale contains 14 items which measures the core factors of engagement; vigour (5 items) (eg: “When I’m studying, I feel mentally strong”), dedication (5 items) (eg; “I find my studies to be full of meaning and purpose”) and absorption (4 items) (eg: “Time flies when I’m studying”). Item scores on each construct were summed together to produce a single score. Higher scores on all three scales indicate a high level of overall engagement. The scale has been reported to have acceptable levels of reliability and validity (Schaufeli & Bakker, 2004; Schaufeli et al., 2002) and this was reflected in the present study for each of the dimensions; vigour ($\alpha = 0.84$), dedication ($\alpha = 0.83$) and absorption ($\alpha = 0.78$).

2.4.7 Health Outcomes

A range of health outcomes were measured as part of the study. *Burnout* was measured with the 15-item Maslach Burnout Inventory Student Survey (MBI-SS) (Schaufeli, Salanova, Gonzalez-Roma & Bakker, 2002a). The scale measures the three core factors of student burnout; exhaustion (5 items) (eg; “I feel emotionally drained by my studies”), cynicism (4 items) (eg; “I have become less interested in my studies since my enrolment at the university”) and professional efficacy (6 items) (eg; “I can effectively solve the problems that arise in my studies”). Item scores on each construct were summed together to produce a single score for that dimension, with higher scores on exhaustion and cynicism and lower scores on professional efficacy, indicating higher levels of burnout. The scale has been reported to have acceptable levels of reliability and validity (Schaufeli et al., 2002a). This was also reflected in the present study for each of the dimensions; exhaustion ($\alpha = 0.91$), cynicism ($\alpha = 0.89$) and professional efficacy ($\alpha = 0.76$).

General psychological wellbeing was measured using the 5-item World Health Organization Well-Being Index (WHO-5) (Psychiatric Research Unit, World Health Organization (WHO), 1998). Items

were scored on a 6-point Likert scale ranging from at no time (0) to all of the time (5). Item scores were summed together and multiplied by 4 to produce a single score out of 100. Higher total scores indicated a greater level of psychological wellbeing. The scale has a high level of internal consistency reliability ($\alpha = 0.84$) (Bech, Olsen, Kjoller & Rasmussen, 2003) and in this study it was $\alpha = 0.86$. It is also a sufficiently sensitive and specific screening tool for depression (Topp, Ostergaard, Sondergaard & Bech, 2015).

2.4.8 Work Outcomes

Job satisfaction was one of two work outcomes measured as part of the research program. It was measured with the 3-Item Job Satisfaction Scale from the Michigan Organizational Assessment Questionnaire (MOAQ) (Cammann, Fichman, Jenkins & Klesh, 1979). The scale aims to measure "...organization members' overall affective responses to their jobs" (Cammann et al., 1979). The second item was reversed as outlined by Cammann et al., (1979). The scale has an acceptable level of internal consistency reliability ($\alpha = 0.77$) (Cammann et al., 1979) and in this study it was $\alpha = 0.86$.

Turnover Intention was measured with the Turnover Intention Scale (TIS-6) (Boothma & Roodt, 2013). The scale contains 6 items which seeks to measure the extent to which an employee intends to stay or leave the organization they currently work for. The scale has a good level of internal consistency reliability ($\alpha = 0.80$) (Boothma & Roodt, 2013) and in this study it was $\alpha = 0.85$. The scale has also been reported to have a good level of criterion-predictive validity, being able to significantly predict between leavers and stayers (actual turnover) (Boothma & Roodt, 2013).

2.5 Procedure

Participants were largely recruited through social media. Advertising posters were also displayed around the University of Adelaide North Terrace campus (Appendix B). First year

Psychology students at the University of Adelaide were invited to participate in the research program through the Research Participation Program (RPS). This program offers course credit to first year psychology students who participate in research programs. No incentive to participate was provided to non-RPS participants.

Participants were invited to participate in the research program through an online survey developed through SurveyMonkey. Prior to participation, participants provided informed consent. RPS participants provided their RPS and Student ID numbers for the purpose of allocating course credit only. Participant confidentiality and anonymity was maintained at all times.

The 20-minute questionnaire comprised of various Likert scales measuring a range of constructs. Optional, free-response sections were also provided, however, were not used for data analysis. Participants were asked to answer each Likert scale with the best option provided. The study was approved by the University of Adelaide, School of Psychology Human Research Ethics Subcommittee (Code Number 19/34).

3. Results

3.1 Data Screening

A total of 608 individuals participated in the study. However, 18 individuals were ineligible to participate as they were not currently enrolled in a university program and a further 21 were excluded as they were not currently employed. A further 238 participants were also excluded from the study as they provided incomplete data (eg; failed to answer certain items and/or complete all scales). After exclusion, the final sample size for the study was $N = 331$. Data was analysed using SPSS Statistics 25 for Mac.

3.2 Power Analysis

A priori power analysis was conducted using R Studio for Mac. Results indicated that a sample size of $N = 113$ was needed to achieve a power level of .80 when adopting a significance criterion of $\alpha = .05$, measuring for medium effect sizes ($f^2 = 0.15$) and using a linear model with 9 predictors. With a final sample size of $N = 331$, the study had sufficient statistical power for the linear models that were tested.

3.3 Assumptions of Correlational and Multiple Linear Regression Analyses

The relevant assumptions for Pearson's r Correlation were met, except for normality. Results of Shapiro-Wilk tests indicated significant results for all but 5 variables, indicating that most variables were non-normally distributed. As such, Spearman's ρ correlation was used for correlational analyses.

Assumptions of multiple linear regression (normality of residuals, linearity, homoscedasticity and absence of multicollinearity) were all met. This test was used to; a) predict Work-Study Conflict

(WSC) and Work-Study Facilitation (WSF) from job characteristics and personality and; b) to predict each of the outcomes from WSC and WSF.

3.4 Description of Participants

Demographic information of the sample is presented in Tables 6 and 7. The average age of participants was 22.14 years. Of those, 78.9% were women, 20.8% were male and 0.3% preferred not to specify their gender.

Participants were mostly casually employed (66.3%) and the majority only had one job (70.7%). The primary reason for working that was reported was to earn an income (93.4%). Participants were employed in a broad range of industries, with food and hospitality (33.5%) and retail (29%) being the most frequently reported. The sample was largely made up of students from the University of Adelaide (82.2%), followed by the other South Australian Universities (14.2%) and a number of other institutions (3.6%).

Participants were enrolled in a variety of disciplines, with Health and Medical Sciences (35.6%), Arts (21.8%) and Professions (19%) faculties being the most common. They were overwhelmingly enrolled full-time (89.4%) and were studying a Bachelor's degree (85.8%). Participants from all stages of their degree were represented, however, most participants were in the middle of their studies (39.9%). On average, participants were spending more time per week at work (19.03 hours) than at university (14.68 hours) but were still spending more time overall working on their studies (21.38 hours). This suggests participants are engaging with their studies remotely (eg; from home).

Table 6
Demographic Information of the Sample

Demographic Variable	Total Number	% of Sample
Gender		
Female	261	78.9%
Male	69	20.8%
Prefer not to Say	1	0.3%
Employment Status		
Casual	219	66.3%
Full-Time	22	6.7%
Part-Time	89	27.0%
Number of Jobs		
1	234	70.7%
2	80	24.2%
3+	17	5.1%
Primary Reason for Work		
Component of Studies	2	0.6%
Experience	20	6.0%
Income	309	93.4%
Employment Industry		
Administration	9	2.8%
Corporate	13	4.0%
Engineering	3	1.0%
Entertainment	5	1.5%
Fast Food	11	3.3%
Food and Hospitality	111	33.5%
Health and Fitness	23	6.9%
IT	3	0.9%
Labour and Maintenance	4	1.2%
Public Service	5	1.5%
Research and Academia	2	0.6%
Retail	96	29%
Service	20	6.0%
Sport and Education	21	6.3%
Transport	5	1.5%
University Attended		
Flinders University	25	7.6%
Other	12	3.6%
University of Adelaide	272	82.2%
University of South Australia	22	6.6%
Discipline of Study		
Arts	72	21.8%
Engineering and Mathematics	28	8.5%
Health and Medical Sciences	118	35.6%
Professions	63	19%
Science	50	15.1%

Enrolment Status		
Full-Time	296	89.4%
Part-Time	35	10.6%
Degree Level		
Bachelor	284	85.8%
Certificate IV	1	0.3%
Graduate Diploma	1	0.3%
Honours	27	8.2%
Masters	13	3.9%
PhD	5	1.5%
Degree Progress		
Beginning	96	29%
Middle	132	39.9%
End	103	31.1%

3.5 Descriptive Statistics

Descriptive statistics of the variables measured can be seen in Table 7. A correlation matrix of these can also be seen in Table 8. The Cronbach Alpha for each of the measures can be seen on the diagonal and were all at a minimum, at the acceptable level (DeVellis, 2012).

Table 7

Descriptive Statistics of Demographic Variables, WSC, WSF, Antecedents and Outcomes Variables

Variable	Mean	SD	Min	Max
Demographic Variables				
Age	22.14	5.39	17	59
Average Hours at Uni (per week)	14.68	9.21	0	50
Average Hours on Uni Work (per week)	21.38	13.40	1	80
Personality				
Extraversion	31.02	8.03	11	49
Agreeableness	40.38	5.85	17	50
Conscientiousness	34.07	6.51	18	48
Neuroticism	25.95	7.85	10	48
Openness	36.77	5.50	19	50
Job Characteristics				
Job Demands	20.10	4.89	7	30
Average Work Hours (per week)	19.03	9.54	3	70
Job Control	27.13	7.34	9	45
Job-Study Congruence	6.21	3.55	3	15
WSC	25.44	6.90	8	44
WSF	29.64	7.70	10	50
Work Outcomes				
Job Satisfaction	10.47	3.17	3	15
Turnover Intention	19.07	5.82	5	30
Academic Outcomes				
Study Satisfaction	22.48	4.33	8	30
Study Effort	14.08	2.68	5	20
Study Preparation	14.73	3.14	6	20
Study Attendance	18.93	4.69	5	25
Vigour	13.15	4.01	5	25
Dedication	18.08	3.67	5	25
Absorption	11.34	3.32	3	20
Health Outcomes				
Exhaustion	17.63	4.46	6	25
Cynicism	11.43	4.50	4	20
Professional Efficacy	22.02	4.30	10	30
Subjective Psychological Wellbeing	40.15	18.63	0	96

Note: N = 331

Table 8

Spearman's Correlation with Cronbach's Alpha on the Diagonal

Scale	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23		
1. EX	(.90)																								
2. AG	.26**	(.83)																							
3. CN	-.05	.16**	(.78)																						
4. NE	.24**	-.02	.21**	(.87)																					
5. OP	.28**	.30**	.18**	.02	(.77)																				
6. JD	.13*	.09	-.01	-.16**	.18**	(.86)																			
7. JC	.24**	.22**	.09	.13*	.24**	.12*	(.85)																		
8. JSC	.11	.14*	.08	.08	.16**	.01	.48**	(.92)																	
9. WSC	.03	.03	-.16**	-.26**	.04	.53**	.03	.04	(.85)																
10. WSF	.16**	.23**	.10	.11	.16**	.05	.42**	.52**	.12*	(.87)															
11. JS	.23**	.16**	.13*	.21**	.17**	-.25**	.47**	.29**	-.24**	.41**	(.92)														
12. TI	-.24**	-.18**	-.11	-.27**	-.10	.26**	-.41**	-.24**	.24**	-.30**	-.80**	(.85)													
13. SS	.06	.11	.17**	.20**	.13*	-.07	.03	-.03	-.22**	.11	.08	-.03	(.90)												
14. SE	.10	.26**	.43**	.16**	.23**	-.01	.07	.03	-.14*	.07	.11*	-.05	.34**	(.77)											
15. SP	-.02	.19**	.46**	.14*	.11*	-.10	.04	.07	-.21**	.12*	.16**	-.15**	.22**	.55**	(.77)										
16. SA	-.03	.06	.35**	.20**	.04	-.04	.07	.07	-.20**	.05	.10	-.13*	.27**	.47**	.44**	(.87)									
17. VG	.12*	.20**	.36**	.30**	.23**	-.06	.13*	.07	-.32**	.19**	.14*	-.10	.53**	.46**	.40**	.32**	(.84)								
18. DE	.09	.23**	.32**	.14*	.22**	.041	.07	.08	-.11*	.14*	.10	-.01	.61**	.50**	.32**	.31**	.55**	(.83)							
19. AB	.03	.11*	.31**	.09	.20**	.06	.10	.13*	-.14*	.23**	.05	-.01	.45**	.35**	.32**	.26**	.61**	.45**	(.78)						
20. EH	-.15**	.02	-.20**	-.47**	-.02	.20**	-.10	-.07	.41**	-.08	-.17**	.18**	-.49**	-.26**	-.27**	-.27**	-.60**	-.44**	-.34**	(.91)					
21. CY	-.10	-.11*	-.27**	-.28**	-.08	.10	-.03	-.03	.31**	-.02	-.14*	.11*	-.59**	-.42**	-.29**	-.32**	-.53**	-.64**	-.39**	.64**	(.89)				
22. PE	.18**	.20**	.36**	.22**	.29**	.01	.13*	.15**	-.19**	.23**	.14**	-.09	.44**	.58**	.44**	.41**	.54**	.57**	.39**	-.40**	-.46**	(.76)			
23. SPW	.21**	.10	.14**	.52**	.62	-.17**	.15**	.13*	-.32**	.17**	.27**	-.26**	.31**	.09	.21**	.15**	.40**	.27**	.25**	-.57**	-.36**	.29**	(.86)		
24. WH	.09	-.01	-.04	.06	.11*	.36**	.21**	.09	.43**	.14*	.03	-.04	-.18**	-.12*	-.08	-.08	-.08	-.08	-.13*	-.17**	.03	.14*	-.07	-.05	

Note: EX= Extraversion, AG = Agreeableness, CN = Conscientiousness, NE = Neuroticism, OP = Openness, JD = Job Demands, JC = Job Control, JSC = Job Study Congruence, WSC = Work Study Conflict, WSF = Work Study Facilitation, JS = Job Satisfaction, TI = Turnover Intention, SS = Study Satisfaction, SE = Study Effort, SP = Study Preparation, SA = Study Attendance, VG = Vigour, DE = Dedication, AB = Absorption, EH = Exhaustion, CY = Cynicism, PE = Professional Efficacy, SPW = Subjective Psychological Wellbeing, WH = Average Work Hours (per week)

** $p < .01$ (two-tailed significance), * $p < .05$ (two-tailed significance)

3.6 Antecedents of Work-Study Conflict and Work-Study Facilitation

Results of stepwise multiple linear regression to predict WSC and WSF with job characteristics and personality can be seen in Table 9.

In the WSC model, the first step was significant, with job characteristics explaining 36% of variance. In step 2, the addition of personality accounted for an additional 6% of variance. The model was again significant.

In the WSF model, job characteristics accounted for 30% of variance in a significant model. With the addition of personality in the second step, the model was again significant and an additional 3% of variance was accounted for.

Hypothesis 1a proposed that a high level of job demands and work hours would predict a high level of WSC. Results of correlational and regression analyses indicated that job demands had a significant, positive relationship with WSC ($\rho = .53, p < .01$) ($\beta = .68, p < .01$), as did work hours ($\rho = .43, p < .01$) ($\beta = .19, p < .01$). Hypothesis 1a was therefore fully supported.

Hypothesis 1b proposed that a high level of job control and job study congruence (JSC) would predict a high level of WSF. Job control had a significant, positive relationship with WSF ($\rho = .42, p < .01$) ($\beta = .20, p < .01$). JSC also had a significant, positive relationship with WSF ($\rho = .52, p < .01$) ($\beta = .90, p < .01$). Hypothesis 1b was also fully supported.

Hypothesis 2a proposed that higher levels of extraversion, openness and conscientiousness would predict lower levels of WSC and that higher levels of neuroticism and agreeableness would predict higher levels of WSC. Extraversion had a non-significant, positive relationship with WSC ($\rho = .03, p > .05$) ($\beta = .08, p > .05$), as did openness ($\rho = .04, p > .05$), although it was a non-significant, negative predictor of WSC ($\beta = -.03, p > .05$). Conscientiousness had a significant, negative relationship with WSC ($\rho = -.16, p < .01$) ($\beta = -.13, p < .01$) along with neuroticism ($\rho =$

-.26, $p < .01$) ($\beta = -.17, p < .01$). Agreeableness had a non-significant, positive relationship with WSC ($\rho = .03, p > .05$) ($\beta = .04, p > .05$). Hypothesis 2a was therefore supported in part, with only the relationship between conscientiousness and WSC being supported. While there was a significant relationship between neuroticism and WSC, it was not in the hypothesized direction. This suggests that those with higher scores on neuroticism reported less WSC.

Hypothesis 2b proposed that higher levels of extraversion, openness and conscientiousness would predict higher levels of WSF and that higher levels of neuroticism and agreeableness would predict lower levels of WSF. Results showed that extraversion had a significant, positive correlation with WSF ($\rho = .16, p < .01$) but was a non-significant, positive predictor ($\beta = .05, p > .05$). Likewise, openness had a significant, positive correlation with WSF ($\rho = .16, p < .01$) but was a non-significant, negative predictor ($\beta = -.06, p > .05$). Both conscientiousness ($\rho = .10, p > .05$) ($\beta = .43, p > .05$) and neuroticism ($\rho = .11, p > .05$) ($\beta = .04, p > .05$) were non-significant, positive predictors of WSF. Agreeableness had a positive, significant relationship with WSF ($\rho = .23, p < .01$) ($\beta = .19, p < .01$). In light of these results, hypothesis 2b was largely not supported. Only the significant, positive relationship between agreeableness and WSF occurred as expected.

Table 9

Results of Stepwise Multiple Linear Regression to Predict WSC and WSF with Job Characteristics and Personality

Predictor	Interrole Constructs			
	Work -Study Conflict (WSC)		Work-Study Facilitation (WSF)	
	ΔR^2	β	ΔR^2	β
Step 1	0.36**		0.30**	
Work Hours ^a		0.19**		0.06
Job Demands		0.68**		0.03
Job Control		-0.13**		0.20**
JSC		0.14		0.90**
Step 2	0.06**		0.03*	
Work Hours		0.20**		0.07
Job Demands		0.62**		0.03
Job Control		-0.10*		0.15*
JSC		0.15		0.90**
Extraversion		0.08		0.05
Neuroticism		-0.17**		0.04
Agreeableness		0.04		0.19**
Openness		-0.03		-0.06
Conscientiousness		-0.13**		0.43
Total R²	0.42**		0.33**	
N	331		331	

Note: JSC = Job-Study Congruence

** $p < .01$, * $p < .05$

^aAverage work hours per week

3.7 Outcomes of Work-Study Conflict and Work-Study Facilitation

The results of simple linear regression to examine the extent to which WSC and WSF predicted the outcome variables can be seen in Table 10.

Hypothesis 3a proposed that higher levels of WSC would result in reduced study satisfaction, study readiness and engagement. Results of correlation and regression analyses indicated that WSC had a significant, negative relationship with study satisfaction ($\rho = -.22, p < .01$) ($\beta = -.15, p < .01$), study effort ($\rho = -.14, p < .01$) ($\beta = -.15, p < .01$), study preparation ($\rho = -.21, p < .01$) ($\beta = -.11, p < .01$), study attendance ($\rho = -.20, p < .01$) ($\beta = -.15, p < .01$), vigour ($\rho = -.32, p$

<.01) ($\beta = -.18, p < .01$), dedication ($\rho = -.11, p < .05$) ($\beta = -.61, p < .01$) and absorption ($\rho = -.14, p < .05$) ($\beta = -.07, p < .01$). Hypothesis 3a was therefore fully supported.

In contrast, hypothesis 3b proposed that higher levels of WSF would result in increased study satisfaction, study readiness and engagement. Results of correlation and regression analyses indicated that WSF had significant, positive relationship with study preparation ($\rho = .12, p < .05$) ($\beta = .05, p < .05$) and all components of engagement; vigour ($\rho = .19, p < .01$) ($\beta = .11, p < .01$), dedication ($\rho = .14, p < .05$) ($\beta = .08, p < .01$) and absorption ($\rho = .23, p < .01$) ($\beta = .09, p < .01$). While it had a non-significant, positive correlation with study satisfaction ($\rho = .11, p > .05$), WSF was a significant, positive predictor of study satisfaction ($\beta = .08, p < .01$). However, there was a non-significant, positive relationship between WSF and study effort ($\rho = .07, p > .05$) ($\beta = .03, p > .05$) and study attendance ($\rho = .05, p > .05$) ($\beta = .04, p > .05$). Hypothesis 3b was therefore only partially supported.

Hypothesis 4a proposed that higher levels of WSC would result in higher levels of burnout and lower levels of subjective psychological wellbeing. Results of correlational and regression analyses indicated that WSC had a significant, positive relationship with exhaustion ($\rho = .41, p < .01$) ($\beta = .28, p < .01$) and cynicism ($\rho = .31, p < .01$) ($\beta = .20, p < .01$). It had a significant, negative relationship with professional efficacy ($\rho = -.19, p < .01$) ($\beta = -.11, p < .01$) and subjective psychological wellbeing ($\rho = -.32, p < .01$) ($\beta = -.86, p < .01$). Overall, these results indicate that hypothesis 4a was fully supported.

Hypothesis 4b proposed that higher levels of WSF would result in lower levels of burnout and higher levels of subjective psychological wellbeing. Results of correlational and regression analyses indicated that WSF had a significant, positive relationship with professional efficacy (ρ

= .23 $p < .01$) ($\beta = .10, p < .01$) and subjective psychological wellbeing ($\rho = .17, p < .01$) ($\beta = .47, p < .01$). However, they also revealed non-significant, negative relationships between WSF and exhaustion ($\rho = -.08, p > .05$) ($\beta = -.05, p > .05$) and cynicism ($\rho = -.02, p > .05$) ($\beta = -.02, p > .05$).

Therefore, hypothesis 4b was only partially supported.

Hypothesis 5a proposed that higher levels of WSC will result in higher levels of turnover intention and reduced job satisfaction. Results of correlational and regression analyses indicated that WSC had a significant positive relationship with turnover intention ($\rho = .24, p < .01$) ($\beta = .22, p < .01$) but a significant, negative relationship with job satisfaction ($\rho = -.24, p < .01$) ($\beta = -.12, p < .01$). These results indicate that hypothesis 5a was fully supported.

Finally, hypothesis 5b postulated that higher levels of WSF would result in lower levels of turnover intention but increased job satisfaction. Results of correlational and regression analyses indicated that WSF had a significant, negative relationship with turnover intention ($\rho = -.30, p < .01$) ($\beta = -.22, p < .01$) but a significant, positive relationship with job satisfaction ($\rho = .41, p < .01$) ($\beta = .16, p < .01$). Therefore, hypothesis 5b was fully supported.

Table 10

Results of Simple Linear Regression to Predict Outcome Variables from WSC and WSF

Variable	Work-Study Conflict			Work-Study Facilitation		
	β	SE	R ²	β	SE	R ²
Work Outcomes						
Job Satisfaction	-0.12**	0.03	0.06	0.16**	0.02	0.16
Turnover Intention	0.22**	0.05	0.07	-0.22**	0.04	0.08
Academic Outcomes						
Study Satisfaction	-0.15**	0.03	0.05	0.08**	0.03	0.02
Study Effort	-0.06**	0.02	0.02	0.03	0.02	0.01
Study Preparation	-0.11**	0.02	0.05	0.05*	0.02	0.02
Study Attendance	-0.15**	0.04	0.05	0.04	0.03	0.00
Vigour	-0.18**	0.30	0.10	0.11**	0.03	0.04
Dedication	-0.61*	0.03	0.01	0.08**	0.03	0.02
Absorption	-0.07**	0.03	0.02	0.09**	0.02	0.05
Health Outcomes						
Exhaustion	0.28**	0.03	0.18	-0.05	0.03	0.01
Cynicism	0.20**	0.03	0.10	-0.02	0.03	0.09
Professional Efficacy	-0.11**	0.03	0.05	0.10**	0.03	0.05
SPW	-0.86**	0.14	0.10	0.47**	0.13	0.04

Note: SPW = Subjective Psychological Wellbeing

** $p < .01$, * $p < .05$

4. Discussion

This study aimed to extend the existing research on work-study conflict (WSC) and work-study facilitation (WSF) by examining the role of personality in predicting these constructs. It also aimed to identify associated academic, health and work outcomes. These aims were based on four key limitations of the existing literature as identified earlier in this paper.

Results reinforced the importance of job characteristics as strong predictors of WSC and WSF and also highlighted the small role that some personality dimensions play in this relationship. Results also highlighted the distinctly different impacts that WSC and WSF have on various domains in working students' lives. These results are discussed in further depth below, along with strengths, limitations, practical implications of the study and suggestions for further research.

4.1 Antecedents of Work-Study Conflict and Work-Study Facilitation

The first aim of the study was to understand the role of personality traits in conjunction with work characteristics, in predicting WSC and WSF.

Results indicated that job characteristics played a significantly larger role in predicting WSC than personality traits. In particular, higher levels of job demands and work hours were found to predict higher levels of WSC. As expected, this finding was consistent with previous literature (Wyland et al., 2016; Cinamon, 2016; Dundes & Marx, 2007; Butler, 2007; Markel & Frone, 1998) and the resource scarcity perspective of role theory (Greenhaus & Beutell, 1985). Results also indicated that students who possessed a higher level of conscientiousness and neuroticism experienced less WSC. The relationship between conscientiousness and WSC occurred as expected and was consistent with the existing literature (Rantanen et al., 2005; Wayne et al., 2004). The relationship between neuroticism and WSC occurred in the opposite direction to what was expected and was contrary to previous findings that have reported a positive relationship between neuroticism

and work-family conflict (Wille et al., 2013; Allen et al., 2012; Bruck & Allen, 2003). One possible explanation for this result, is that those high on neuroticism are prone to a worrisome and anxious nature. This may encourage them to proactively seek out solutions to balance their work and study commitments in order to reduce the level of worry and stress generated by managing the two domains. However, this does not explain why the relationship occurred in the opposite direction for students experiencing interrole conflict compared with working parents experiencing interrole conflict. Further research is needed to explore this relationship and potential group differences.

Results also indicated that job characteristics played a significantly larger role in predicting WSF than personality traits did. More specifically, higher levels of job control and job-study congruence (JSC) were found to predict higher levels of WSF. These results are consistent with the literature in the area (Wyland et al., 2016; Butler, 2007) and the resource expansion perspective. Results also indicated that students high on the agreeableness trait experienced greater levels of WSF. This was consistent with previous research (Wayne et al., 2004) and occurred as expected in hypothesis 2a.

4.2 Outcomes of Work-Study Conflict and Work-Study Facilitation

The second aim of the study was to understand what impact WSC and WSF have on working student's academic, health and work outcomes.

Results indicated that as levels of WSC increased, working students reported reduced study satisfaction, study readiness (attendance, effort and preparation) and engagement (vigour, dedication and absorption). The findings for reduced study satisfaction and study readiness confirmed the results of previous studies in this area (Creed et al., 2014; Markel & Frone, 1998). This appears to be the first time that the negative relationship between WSC and engagement has been examined and

reported in the literature. The negative relationship is aligned with the resource scarcity perspective and occurred as expected.

In contrast, results of the relationship between WSF and academic outcomes indicated that as WSF increases, so does a working student's engagement, study preparation and study satisfaction. These results confirmed previous findings that a positive relationship exists between WSF and engagement (Creed et al., 2014). The positive relationship between WSF and study preparation and study satisfaction occurred as expected under the resource expansion perspective. This relationship has not been previously explored in the literature and therefore represents a contribution to the WSF literature. It was surprising that there was no significant relationship between WSF and study attendance and study effort given what was expected under the resource expansion perspective in hypothesis 3b. There may be a few explanations for this finding. Firstly, the absence of a relationship between WSF and study attendance may be explained by the changing nature of tertiary education. The Study Attendance dimension of the School Readiness Scale (Markel & Frone, 1998) which was used to measure study attendance, measured it based on physical attendance to traditional classroom lectures and tutorials. It did not capture the recent development of online degrees, lecture recordings and that it is possible for a student to be fully engaged with their studies, however, not physically attend university. Secondly, the absence of a relationship between WSF and study effort may be explained by the nature of facilitation and also the resource expansion perspective. It is possible that if a student has developed ample resources in their work role, which can be transferred to the study role, the student may not need to invest as much effort to fulfil their study demands as they have sufficient resources to draw upon. Further research would be needed to explore these possibilities.

Results of the relationship between WSC and health outcomes indicated that as WSC increased so did participants experience of burnout, but their psychological wellbeing decreased.

These results were consistent with the work of Laughman et al., (2016), Park & Sprung (2013), Adebayo et al., (2008) and Lingard (2007). They were also consistent with the resource scarcity perspective and the health impairment process outlined in JD-R theory (Demerouti et al., 2001).

Results revealed that WSF predicted more positive health outcomes, with higher levels of WSF predicting greater psychological wellbeing and higher levels of professional efficacy. The positive relationship between WSF and subjective psychological wellbeing is consistent with the findings of Creed et al., (2014). However, the relationship between WSF and the components of burnout have not previously been explored in the literature. WSF had a positive relationship with professional efficacy as expected in hypothesis 4b, However, there was not a significant, negative relationship between WSF and the burnout components of exhaustion and cynicism as expected in hypothesis 4b. It was hypothesized that this would occur as a greater sense of interrole facilitation, would provide the individual with the necessary resources to fulfill competing demands without experiencing overwhelming exhaustion and cynicism (Bakker & Demerouti, 2017; Demerouti et al., 2001). The lack of any significant relationship between WSF and the cynicism and exhaustion components of burnout, may be explained by JD-R theory (Demerouti et al., 2001). This argues that burnout occurs when employees are exhausted (due to high job demands) and disengaged (due to low job resources) (Demerouti et al., 2001). This finding is well-documented in the literature (Lesener et al., 2019; Crawford, LePine & Rich, 2010; Hakanen et al., 2008; Bakker et al., 2007, Bakker et al., 2005). As the results of this study have demonstrated, high levels of WSF occur when job resources are high and is likely to lead to higher levels of engagement. Therefore, WSF may not have had any relationship with the exhaustion and cynicism components in this study, as job resources were likely to be high (contributing to higher WSF levels) and students were likely to be engaged rather than disengaged.

Results of the relationship between WSC and work outcomes indicated that as WSC increased, so did participants turnover intention, however, their job satisfaction decreased. These findings occurred as expected and were consistent with previous research by Laughman et al., (2016). In contrast, results indicated that as WSF increased, so did participants job satisfaction, however, their turnover intention reduced. The relationship between WSF and job satisfaction was consistent with previous work in this area (Wyland et al., 2016). However, the negative relationship between WSF and turnover intention has not been examined before and appears to be new in the literature. As previously outlined, this result was consistent with the motivational pathway in JD-R theory (Demerouti et al., 2001), whereby the high level of engagement resulting from high job resources, motivates employees to perform well and strengthens their commitment to their employer (Bakker et al., 2010; Hakanen et al., 2008; Schaufeli & Bakker, 2004; Bakker et al., 2003).

4.3 Evaluation of the Current Study

4.3.1 Limitations

Whilst the study achieved its aims, there are a number of methodological limitations to note. Firstly, the study exclusively collected cross-sectional, self-report data in the second half of a semester. For students, this is likely to be a period with greater workload than the first half due to major assignments and exams generally being due or occurring at this time. As such, student's perceptions about any conflict or facilitation between their work and study roles, may be different compared to the first half of semester. Moving forward, a longitudinal study in this area would be of significant benefit to understand how WSC and WSF vary throughout the academic year and also when they may have a larger or smaller influence on outcome domains.

Secondly, the data obtained was largely from female working students. While gender differences in WSC and WSF have not previously been reported, this skew reduces the external

validity of the study. A replication study of this research program with a more even proportion of genders would assist in resolving this limitation.

Thirdly, a very high number of participants were excluded from the study due to providing incomplete data. This may have occurred due to the length of the questionnaire used and the absence of an incentive to complete it. A shorter survey and/or some form of incentive may have encouraged more participants to fully complete the questionnaire. As noted, a priori power analysis revealed a survey size of $N = 113$ was needed for the study to have sufficient statistical power. Given that $N = 331$ participants provided complete data, removing those who provided incomplete data, was not detrimental to the quality of the study. Moving forward, however, partially completed data could be used to meet ethical obligations to maximize the value of obtained data.

4.3.2 Strengths

The study also had a number of key strengths. Firstly, all scales used had sound psychometric properties and were reliable and valid measures of the given constructs. This provided a solid foundation upon which to build the studies analyses.

Secondly, the study used a valid and reliable measure of personality to consider the role of individual differences in WSC and WSF. This had not been previously explored in the literature. The scale was consistent with the general understanding of personality in the literature.

Thirdly, the study measured WSC and WSF as bidirectional constructs and measured them as such. This ensured that the scores obtained were a true reflection of the role conflict and facilitation students experienced, regardless of the direction that it occurred in.

Finally, the study provided a comprehensive understanding of how WSC and WSF impact the many domains of a working students life. While these differ for both WSC and WSF, the study was able to identify particular outcomes associated with each.

4.3.3 Practical Implications

There are a number of practical implications for both working students and employers that extend from this research.

Firstly, it suggests that working while studying is not necessarily detrimental. Students should seek out work roles that have a manageable workload and work hours, and a role that allows them to have at least a moderate level of control over their work and how it is done. Most importantly, students should continually seek out work that is highly congruent with their studies. The benefits of high levels of job-study congruence have been made clear in this paper.

Secondly, it suggests that employers have a significant level of control over a working student's experience of WSC and WSF. This was highlighted by the fact that job characteristics were found to play the largest role in predicting WSC and WSF. These are factors which are largely controlled by the employer. They should therefore be careful to provide working students with roles that do not have an excessive level of job demands and work hours, as results indicate that such roles are likely lead to higher levels of WSC. They should also consider where an appropriate level of job control (eg; autonomy of decision making and skill discretion) can be given and how they can come to understand what skills and knowledge the student is developing at university. This would allow them to align the students work with their studies (where possible). Results indicate that high levels of these job characteristics are likely to lead to higher levels of WSF. Not only do these factors contribute to improved academic and health outcomes for working students via WSF, results suggest that employers are likely to experience a more engaged workforce that is committed and satisfied with their work.

4.2 Research Directions

While the key aims of the study have been fulfilled, further research is needed to fully understand this area.

Firstly, additional research is needed to confirm the findings from this study on the role of the Big 5 personality traits in predicting WSC and WSF. Further research is also needed to confirm the new relationships identified in this study. These were, the negative relationship between WSC and all engagement components, the positive relationship between WSF and study preparation, study satisfaction and professional efficacy. The negative relationship between WSF and turnover intention also needs to be further examined, in order to determine how robust this effect is. As previously noted, longitudinal research is also needed to understand how WSC and WSF vary across the academic year.

Secondly, further research is also needed to understand the complexity of the relationships identified and how they operate. In particular, this research would be of critical value to understanding the relationships that did not occur as expected (eg; lack of relationship between WSF and study effort, understand changes in study attendance, absence of relationship between WSF and exhaustion and cynicism).

4.3 Conclusions

This study aimed to understand the interplay between the antecedents and outcomes of WSC and WSF. Results highlighted the significant role of job characteristics over the Big 5 personality traits in predicting WSC and WSF. WSC was found to be associated with decreased levels of study satisfaction, study readiness, engagement, psychological wellbeing and job satisfaction. It was found to be associated with increased levels of burnout and turnover intention. In contrast, WSF was found to predict increased levels of study satisfaction, study preparation, engagement and

psychological wellbeing. It negatively predicted turnover intention. Research in this area is of critical importance for both students and employers given the large number of university students who are working while studying. It is important for both interest groups to be aware of particular factors that enable balancing work and study to be a positive experience for both parties. This study has confirmed existing relationships in the literature but also established new ones. Further research is still needed to confirm and expand the findings of this paper, but also explore the unexpected findings in a more in-depth manner.

References

- Adebayo, D. O. (2006). Workload, Social Support and Work-School Conflict Among Nigerian Nontraditional Students. *Journal of Career Development, 33*(2), 125-141.
- Adebayo, D. O., Sunmola, A. M., & Udegbe, I. B. (2008). Subjective wellbeing, work-school conflict and proactive coping among Nigerian non-traditional students. *Career Development International, 13*(5), 440-455.
- Allen, T. D., Johnson, R.C., Saboe, K.N., Cho, E., Dumani, S. & Evans, S. (2012). Dispositional variables and work-family conflict: A meta-analysis. *Journal of Vocational Behavior, 80*, 17-26.
- Bakker, A. B. (2011). An evidence-based model of work engagement. *Current Directions in Psychological Science, 20*, 265-269.
- Bakker, A. B. & Demerouti, E. (2007). The Job Demands-Resources model: state of the art. *Journal of Managerial Psychology, 22*(3), 309-328.
- Bakker, A. B. & Demerouti, E. (2017). Job demands-resources theory: Taking stock and looking forward. *Journal of Occupational Health Psychology, 22*(3), 273-285.
- Bakker, A. B., Demerouti, E., & Euwema, M. C. (2005). Job Resources Buffer the Impact of Job Demands on Burnout. *Journal of Occupational Health Psychology, 10*(2), 170-180.
- Bakker, A. B., Demerouti, E., de Boer, E., & Schaufeli, W. B. (2003). Job demands and job resources as predictors of absence duration and frequency. *Journal of Vocational Behavior, 62*(2), 341-356.
- Bakker, A. B., Hakanen, J. J., Demerouti, E. & Xanthopoulou, D. (2007). Job Resources Boost Work Engagement, Particularly When Job Demands Are High. *Journal of Educational Psychology, 99*(2), 274-284.
- Bakker, A. B., van Veldhoven, M., & Xanthopoulou, D. (2010). Beyond the Demand-Control Model: Thriving on High Job Demands and Resources. *Journal of Personnel Psychology, 9*(1), 3-16.

- Barnett, R. C., Marshall, N.L. & Sayer, A. (1992). Positive-spillover effects from job to home: A closer look. *Women & Health, 19*, 13-41.
- Bech, P., Olsen, L. R., Kjoller, M. & Rasmussen, N. K. (2003). Measuring well-being rather than the absence of distress symptoms: a comparison of the SF-36 Mental Health subscale and the WHO-Five Well-Being Scale. *International Journal of Methods in Psychiatric Research, 12*(2), 85-91.
- Benner, K., & Curl, A. L. (2018). Exhausted, Stressed, and Disengaged: Does Employment Create Burnout for Social Work Students? *Journal of Social Work Education, 54*(2), 300-309.
- Bothma, C. F. C., & Roodt, G. (2013). The validation of the turnover intention scale. *SA Journal of Human Resource Management, 11*(1).
- Broadbridge, A., & Swanson, V. (2006). Managing Two Roles: A theoretical study of student's employment whilst at university. *Community, Work & Family, 9*(2), 159-179.
- Bruck, C. S. & Allen, T.D. (2003). The relationship between big five personality traits, negative affectivity, type A behaviour and work-family conflict. *Journal of Vocational Behavior, 63*, 457-472.
- Butler, A. B. (2007). Job Characteristics and College Performance and Attitudes: A Model of Work-School Conflict and Facilitation. *Journal of Applied Psychology, 92*(2), 500-510.
- Cammann, C., Fichman, M., Jenkins, D. & Klesh, J. (1979). *The Michigan Organizational Assessment Questionnaire*. University of Michigan, Ann Arbor.
- Chapman, N. J., Ingersoll-Dayton, B. & Neal, M.B. (1994). Balancing the multiple roles of work and caregiving for children, adults and elders. In *Job stress in a changing workforce: Investigating gender, diversity and family issues* (pp. 283-300). Washington, DC, USA: American Psychological Association.
- Cinamon, R. G. (2016). Integrating Work and Study Among Young Adults: Testing an Empirical Model. *Journal of Career Assessment, 24*(3), 527-542.

- Costa, P. T. & McCrae, R.R. (1995). Domains and Facets: Hierarchical Personality Assessment Using the Revised NEO Personality Inventory. *Journal Of Personality Assessment*, 64(1), 21-50.
- Costa, P. T. & McCrae, R.R. (1992). *Revised NEO personality inventory (NEO PI-R) and NEO five-factor inventory (NEO-FFI): Professional Manual*. Odessa, FL: Psychological Assessment Resources.
- Crawford, E.R., LePine, J.A. & Rich, B.L. (2010). Linking job demands and resources to employee engagement and burnout: A theoretical extension and meta-analytic test. *Journal of Applied Psychology*, 95, 834-848.
- 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.
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The Job Demands-Resources Model of Burnout. *Journal of Applied Psychology*, 86(3), 499-512.
- DeVellis, R. F. (2012). *Scale development: Theory and Applications*. Los Angeles, USA: Sage Publications.
- Dundes, L. & Marx, J. (2007). Balancing Work and Academics in College: Why Do Students Working 10 to 19 Hours per Week Excel? *Journal of College Student Retention*, 8(1), 107-120.
- Goldberg, L. R. (1992). The development of markers for the Big-Five factor structure. *Psychological Assessment*, 4, 26-42.
- Goldberg, L. R. (1995). What the hell took so long? Donald Fiske and the Big-Five factor structure. In *Personality research, methods and theory: A Festschrift honouring Donald W.Fiske*. Hillsdale, NJ: Erlbaum.
- Goldberg, L. R., Johnson, J. A., Eber, H. W., Hogan, R., Ashton, M. C., Cloninger, C. R., & Gough, H. G. (2006). The international personality item pool and the future of public-domain personality measures. *Journal of Research in Personality*, 40(1), 84-96.
- Goode, W. (1960). A theory of role strain. *American Sociological Review*, 25(25), 483-496.

- Greenhaus, J. H., & Beutell, N. J. (1985). Sources of Conflict Between Work and Family Roles. *Academy of Management Review*, 10(1), 76-88.
- Greenhaus, J. H., & Powell, G. N. (2006). When Work and Family Are Allies: A Theory of Work-Family Enrichment. *Academy of Management Review*, 31(1), 72-82.
- Gutek, B. A., & Searle, S. (1991). Rational Versus Gender Role Explanations for Work-Family Conflict. *Journal of Applied Psychology*, 76(4), 560-568.
- Haar, J. M., Roche, M. & Taylor, D. (2012). Work-family conflict and turnover intentions of indigenous employees: The importance of the whanau/family for Maori. *The International Journal of Human Resource Management*, 23, 2546-2560.
- Hackman, J.R., & Oldham, G.R. (1976). Motivation through the design of work. *Organizational Behaviour and Human Performance*, 16, 250-279.
- Hakanen, J. J., Schaufeli, W. B., & Ahola, K. (2008). The Job Demands-Resources model: A three-year cross-lagged study of burnout, depression, commitment, and work engagement. *Work & Stress*, 22(3), 224-241.
- Hammer, L., Allen, E. & Grigsby, T.D. (1997). Work-family conflict in dual-earner couples: Within individual and crossover effects of work and family. *Journal of Vocational Behavior*, 50(2), 185-203.
- Hofstede, G., Neujin, B., Daval Ohayv, D. & Sanders, G. (1990). Measuring Organizational Cultures: A Qualitative and Quantitative Study across Twenty Cases. *Administrative Science Quarterly*, 35(2), 286-316.
- Kacmar, K. M., Crawford, W.S., Carlson, D.S., Ferguson, M. & Whitten, D. (2014). A Short and Valid Measure of Work-Family Enrichment. *Journal of Occupational Health Psychology*, 19(1), 32-45.

- Kahn, R. L., Wolfe, D.M., Quinn, R.P., Snoek, J.D. & Rosenthal, R.A. (1964). *Organizational stress: Studies in role conflict and ambiguity*. Oxford, England: John Wiley.
- Karasek, R. A. (1979). Job Demands, Job Decision Latitude and Mental Strain: Implications for Job Redesign. *Administrative Science Quarterly*, 24(2), 285-308.
- Kopelman, R. E., Greenhaus, J.H. & Connolly, T.F. (1983). A model of work, family and interrole conflict: A construct validation study. *Organizational Behaviour & Human Performance*, 32(2), 198-215.
- Laughman, C., Boyd, E. M. & Rusbasan, D. (2016). Burnout as a Mediator Between Work–School Conflict and Work Outcomes. *Journal of Career Development*, 43(5), 413-425.
- Lesener, T., Burkhard, G. & Wolter, C. (2019) The job demands-resources model: A meta-analytic review of longitudinal studies. *Work & Stress*, 33(1), 76-103.
- Lingard, H. (2007). Conflict Between Paid Work and Study: Does it Impact upon Students' Burnout and Satisfaction with University Life? *Journal for Education in the Built Environment*, 2(1), 90-109.
- Markel, K. S. & Frone, M. R. (1998). Job Characteristics, Work-School Conflict and School Outcomes Among Adolescents: Testing a Structural Model. *Journal of Applied Psychology*, 83(2), 277-287.
- Marks, S. R. (1977). Multiple Roles and Role Strain: Some Notes on Human Energy, Time and Commitment. *American Sociological Review*, 42(December), 921-936.
- Maslach, C., Schaufeli, W.B. & Leiter, M. (2009). Burnout: 35 Years of research and practice. *Career Development International*, 14(3), 204-220.
- Nohe, C. S., K. (2014). Work-family conflict, social support and turnover intentions: A longitudinal study. *Journal of Vocational Behavior*, 85, 1-12.
- Owen, M. S., Kavanagh, P. S. & Dollard, M. F. (2018). An Integrated Model of Work–Study Conflict and Work–Study Facilitation. *Journal of Career Development*, 45(5), 504-517.

Park, Y. & Sprung, J. M. (2013). Work-School Conflict and Health Outcomes: Beneficial Resources for Working College Students. *Journal of Occupational Health Psychology, 18*(4), 384-394.

Paulson, D. & Leuty, M.E. (2016). Dispositional Coping, Personality Traits and Affective Style Relating to Conflict between Work and Family Domains. *Journal of Family and Economic Issues, 37*(4), 519-539.

Pervin, L. A. (1996). *The Science of Personality*. New York: Wiley.

Psychiatric Research Unit, World Health Organization (WHO) (1998). WHO (Five) Well-Being Index (1998 Version). Retrieved from https://www.psykiatri-regionh.dk/who-5/Documents/WHO5_English.pdf

Rantanen, J., Pulkkinen, L. & Kinnunen, U. (2005). The Big Five personality dimensions, work-family conflict and psychological distress: A longitudinal view. *Journal of Individual Differences, 26*, 155-166.

Rice, R. W., Frone, M.R & McFarlin, D.B. (1992). Work-nonwork conflict and perceived quality of life. *Journal of Organizational Behavior, 13*(2), 155-168.

Ruderman, M. N., Ohlott, P.J., Panzer, K. & King, S.N. . (2002). Benefits of Multiple Roles for Managerial Women. *Academy of Management Journal, 45*, 369-386.

Schaufeli, W. B. (2017). Applying the job demands-resources model. *Organizational Dynamics, 46*, 120-132.

Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: a multi-sample study. *Journal of Organizational Behavior, 25*(3), 293-315.

Schaufeli, W. B., Salanova, M., Gonzalez-Roma, V & Bakker, A.B. (2002a). The Measurement of Engagement and Burnout: A Two Sample Confirmatory Factor Analytic Approach. *Journal of Happiness Studies, 3*, 71-92.

- Topp, C. W., Ostergaard, S. D., Sondergaard, S., & Bech, P. (2015). The WHO-5 Well-Being Index: A Systematic Review of the Literature. *Psychotherapy and Psychomatics, 84*, 167-176.
- Universities Australia. (2018). 2017 Universities Australia Student Finances Survey. Retrieved from <https://www.universitiesaustralia.edu.au/wp-content/uploads/2019/06/180713-2017-UA-Student-Finance-Survey-Report.pdf>
- Watson, D., Clark, L.A. & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS Scales. *Journal of Personality and Social Psychology, 47*, 1063-1070.
- Wayne, J. H., Musisca, N. & Fleeson, W. (2004). Considering the role of personality in the work-family experience: Relationships of the big five to work-family conflict and facilitation *Journal of Vocational Behavior, 64*, 108-130.
- Wayne, J. H., Randel, A. E., & Stevens, J. (2006). The role of identity and work-family support in work-family enrichment and its work-related consequences. *Journal of Vocational Behavior, 69*, 445-461.
- Wille, B., De Fruyt, F. & Feys, M. (2013). Big Five Traits and Intrinsic Success in the New Career Era: A 15-Year Longitudinal Study on Employability and Work-Family Conflict. *Applied Psychology, 62*(1), 124-156.
- Williams, K. J. & Alliger, G. M. (1994) Roles stressors, mood spillover, and perceptions of work-family conflict in employed parents. *Academy of Management Journal, 37*, 837-868.
- Wyland, R., Lester, S. W., Ehrhardt, K., & Standifer, R. (2016). An Examination of the Relationship Between the Work-School Interface, Job Satisfaction, and Job Performance. *Journal of Business and Psychology, 31*(2), 187-203.
- Zhang, M., Griffeth, R.W. & Fried, D.D. (2012). Work-family conflict and individual consequences. *Journal of Managerial Psychology, 27*(7), 696-713.

Appendix A: Online Questionnaire

Work-Study Balance and Associated Outcomes

Participant Information

Thank you for showing an interest in participating in this research program. Please read the information below as it contains important details about the project and your role as a participant.

What is the project about?

This research project is about understanding various outcomes associated with balancing work and study. The impact of balancing these two roles can be both positive (work-study facilitation) but also negative (work-study conflict). This research project will explore how a student's work environment and personality interacts with their work and study commitments and how this interaction leads to a range of academic, health and work outcomes.

Who is undertaking the project?

This project is being conducted by Benjamin Kropf. This research will form the basis for the degree of Bachelor of Psychological Science (Honours) at the University of Adelaide under the supervision of Dr Aspa Sarris.

Why am I being invited to participate?

You are being invited to participate in the project as you are a university student in 2019 who is also engaged in some form of paid employment.

What am I being invited to do?

You are being invited to complete an online questionnaire about your experience of balancing work and study. This involves providing responses to questions about your personality, work and workplace, university studies and mental health.

How much time will my involvement in the project take?

The questionnaire should take approximately 25 minutes to complete. Free response answers are voluntary and can be skipped.

Are there any risks associated with participating in this project?

Participants may experience distress when reflecting upon their work or study experience or their mental health. Those who experience such distress as a result of completing the survey are encouraged to contact the researcher. Participants should also seek support from the University of Adelaide Counselling Service or their General Practitioner.

What are the potential benefits of the research project?

The project may provide an understanding of the dynamic relationship between work and study domains. This information may highlight sources of student's work-study conflict and work-study facilitation. By identifying these relationships, universities and employers may have a greater understanding of how working students can be supported to achieve optimal academic, health and work outcomes.

Can I withdraw from the project?

Participation in this project is completely voluntary. If you agree to participate, you can withdraw from the study at any time. Data can be withdrawn from the study at any time up until the submission of the thesis.

What will happen to my information?

Participant information will be non-identifiable and will be used to generate descriptive and inferential statistics which will be published as a research thesis in fulfilment of an Honours degree. No raw participant information will be published, except for free response answers which may be published as an example of a theme across results. The completed thesis will be made publicly available through the University of Adelaide's thesis repository. The project findings may also be made publicly accessible through journal articles and/or a conference paper.

First year psychology students participating in this study as part of the Research Participation System (RPS) at the University of Adelaide, will be required to provide their student ID number. This information will only be used to allocate course credit and will be deleted upon completion of Semester 1, 2019.

Participant information will be securely stored on the website hosting the survey and securely downloaded and stored on the researcher's computer for data analysis. As required by law, participant data will be stored for 5 years and will only be accessible to the researchers. Data from this research program will not be used for future research.

Who do I contact if I have questions about the project?

Participants can email student researcher Benjamin Kropf [REDACTED] or the principal investigator, Dr Aspa Sarris (aspa.sarris@adelaide.edu.au) if they have any questions about the project.

What if I have a complaint or any concerns?

The study has been approved by the Human Research Ethics Committee at the University of Adelaide (approval number [REDACTED]). This research project will be conducted according to the NHMRC National Statement on Ethical Conduct in Human Research 2007 (Updated 2018). If you have questions or problems associated with the ethics of this study, please contact the Acting Chair of the Subcommittee for Human Research in the School of Psychology, Dr Paul Delfabbro (paul.delfabbro@adelaide.edu.au).

If I want to participate, what do I do?

To proceed with participation in this study, participants should begin completing this questionnaire by clicking 'next'.

Work-Study Balance and Associated Outcomes Demographic Information

* 5. What is your gender?

- Male
- Female
- Prefer Not to Answer

* 6. How old are you?

* 7. On what basis are you employed?

- Not Employed
- Casual
- Part-Time
- Full-Time

* 8. How many paid jobs do you have?

- None
- One
- Two
- Three or More

If you have more than one job, please only report on the job you work the most hours in for the purposes of this research program.

* 9. On average, how many hours per week are you engaged in paid work during semester?

* 15. Which of the following broad discipline areas are you studying in?

- Arts (Music, Education, Humanities and Social Sciences)
 Professions (Architecture, Commerce, Economics and Law)
- Engineering and Mathematics
 Science
- Health and Medical Sciences

Other (please specify)

* 16. What is your current enrolment status at university?

- Full-Time
- Part-Time

* 17. What level of degree are you studying?

- Bachelor
 Masters
- Graduate Diploma
 PhD
- Honours

Other (please specify)

* 18. How far into your degree are you?

- Beginning
- Middle
- End

Other (please specify)

	Very Inaccurate	Moderately Inaccurate	Neither Accurate Nor Inaccurate	Moderately Accurate	Very Accurate
I am full of ideas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

◆ පාලන කාර්යයන් මගින් මධ්‍යම පාලන කාර්යයන්
 ☆ පාලන කාර්යයන්

මෙහි ඇති ප්‍රශ්න වලට ඔබගේ අත්දැකීම් මත පදනම්ව පිළිතුරු දීමට ඔබට අවස්ථාවක් ඇත. පිළිතුරු දීමට ඔබට අවස්ථාවක් ඇත.

	බොහෝ විට	සමහර විට	මධ්‍යම	කිසිවිට	විශේෂයෙන්ම
◆ පාලන කාර්යයන් මගින් මධ්‍යම පාලන කාර්යයන්	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
◆ පාලන කාර්යයන් මගින් මධ්‍යම පාලන කාර්යයන්	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
◆ පාලන කාර්යයන් මගින් මධ්‍යම පාලන කාර්යයන්	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
◆ පාලන කාර්යයන් මගින් මධ්‍යම පාලන කාර්යයන්	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
◆ පාලන කාර්යයන් මගින් මධ්‍යම පාලන කාර්යයන්	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
◆ පාලන කාර්යයන් මගින් මධ්‍යම පාලන කාර්යයන්	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
◆ පාලන කාර්යයන් මගින් මධ්‍යම පාලන කාර්යයන්	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	◆ ◆ ◆	◆ ◆ ◆	◆ ◆ ◆	◆ ◆ ◆	◆ ◆ ◆
◆ ◆ ◆	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
◆ ◆ ◆	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
◆ ◆ ◆	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
◆ ◆ ◆	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
◆ ◆ ◆	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
◆ ◆ ◆	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
◆ ◆ ◆	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
◆ ◆ ◆	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
◆ ◆ ◆	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
◆ ◆ ◆	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Never	Rarely	Sometimes	Often	Always
I can get carried away by my studies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<p>29. Please feel free to provide any additional comments about your university experience below. This may relate to anything raised in the statements above.</p>					

✦ **ආර්ථිකයේ සහභාගීත්වය** ✦ **වෛස්වකාමීය ආදායම**
 ✦ **වෛස්වකාමීය ආදායම** ✦ **වෛස්වකාමීය ආදායම** ✦ **වෛස්වකාමීය ආදායම**

✦ **වෛස්වකාමීය ආදායම** ✦ **වෛස්වකාමීය ආදායම** ✦ **වෛස්වකාමීය ආදායම** ✦ **වෛස්වකාමීය ආදායම**

	වෛස්වකාමීය ආදායම	වෛස්වකාමීය ආදායම	වෛස්වකාමීය ආදායම	වෛස්වකාමීය ආදායම	වෛස්වකාමීය ආදායම
✦ වෛස්වකාමීය ආදායම ✦ වෛස්වකාමීය ආදායම ✦ වෛස්වකාමීය ආදායම	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
✦ වෛස්වකාමීය ආදායම ✦ වෛස්වකාමීය ආදායම ✦ වෛස්වකාමීය ආදායම	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
✦ වෛස්වකාමීය ආදායම ✦ වෛස්වකාමීය ආදායම ✦ වෛස්වකාමීය ආදායම	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
✦ වෛස්වකාමීය ආදායම ✦ වෛස්වකාමීය ආදායම ✦ වෛස්වකාමීය ආදායම	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
✦ වෛස්වකාමීය ආදායම ✦ වෛස්වකාමීය ආදායම ✦ වෛස්වකාමීය ආදායම	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
✦ වෛස්වකාමීය ආදායම ✦ වෛස්වකාමීය ආදායම ✦ වෛස්වකාමීය ආදායම	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
✦ වෛස්වකාමීය ආදායම ✦ වෛස්වකාමීය ආදායම ✦ වෛස්වකාමීය ආදායම	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	සමාජ	වෛද්‍ය	අධ්‍යාපන	ව්‍යාපාර	වෙනත්
<p>අන්‍යෝන්‍යව පවතින</p> <p>විකල්ප</p> <p>විකල්ප</p> <p>විකල්ප</p> <p>විකල්ප</p> <p>විකල්ප</p>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<p>අන්‍යෝන්‍යව</p> <p>විකල්ප</p> <p>විකල්ප</p> <p>විකල්ප</p> <p>විකල්ප</p> <p>විකල්ප</p> <p>විකල්ප</p>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<p>විකල්ප</p> <p>විකල්ප</p> <p>විකල්ප</p> <p>විකල්ප</p> <p>විකල්ප</p> <p>විකල්ප</p>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<p>විකල්ප</p> <p>විකල්ප</p> <p>විකල්ප</p> <p>විකල්ප</p> <p>විකල්ප</p> <p>විකල්ප</p>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<p>විකල්ප</p> <p>විකල්ප</p> <p>විකල්ප</p> <p>විකල්ප</p> <p>විකල්ප</p> <p>විකල්ප</p>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

32. Please feel free to provide any additional comments about the interaction between your university studies and your work commitments. This may relate to anything raised in the statements above.

**Work-Study Balance and Associated Out comes
Your Psychological Health**

* 33. Please read the following statements and indicate how often you experience each statement. Use the best available option to answer.

	Never	Rarely	Sometimes	Often	Always
I feel emotionally drained by my studies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel used up at the end of a day at university	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel tired when I get up in the morning and I have to face another day at university	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Studying or attending a class is really a strain for me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel burned out from my studies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have become less interested in my studies since my enrolment at the university	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have become less enthusiastic about my studies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have become more cynical about the potential usefulness of my studies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	ᱚᱠᱟᱨᱚᱠ	ᱚᱠᱟᱨᱚᱠ	ᱚᱠᱟᱨᱚᱠ	ᱚᱠᱟᱨᱚᱠ	ᱚᱠᱟᱨᱚᱠ
ᱚᱠᱟᱨᱚᱠ ᱚᱠᱟᱨᱚᱠ ᱚᱠᱟᱨᱚᱠ	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ᱚᱠᱟᱨᱚᱠ ᱚᱠᱟᱨᱚᱠ ᱚᱠᱟᱨᱚᱠ	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ᱚᱠᱟᱨᱚᱠ ᱚᱠᱟᱨᱚᱠ ᱚᱠᱟᱨᱚᱠ	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ᱚᱠᱟᱨᱚᱠ ᱚᱠᱟᱨᱚᱠ ᱚᱠᱟᱨᱚᱠ	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ᱚᱠᱟᱨᱚᱠ ᱚᱠᱟᱨᱚᱠ ᱚᱠᱟᱨᱚᱠ	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ᱚᱠᱟᱨᱚᱠ ᱚᱠᱟᱨᱚᱠ ᱚᱠᱟᱨᱚᱠ	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	 Student-Worker Role Conflict	 Student-Worker Role Facilitation	 Student-Worker Role Facilitation	 Student-Worker Role Facilitation	 Student-Worker Role Facilitation	 Student-Worker Role Facilitation
 Student-Worker Role Conflict	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
 Student-Worker Role Facilitation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
 Student-Worker Role Facilitation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
 Student-Worker Role Facilitation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
 Student-Worker Role Facilitation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
 Student-Worker Role Facilitation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Work-Study Balance and Associated Outcomes Additional Comments

35. How does balancing both work and study impact either positively or negatively, on your university studies?

36. How does balancing both work and study impact either positively or negatively on your work? (eg; work performance, time available to work etc.)

37. How does balancing work and study impact either positively or negatively on your psychological health?

Work-Study Balance and Associated Outcomes

38. If you wish to receive a summary of results upon completion of the project, please provide your email address below.

Thank you so much for your time! Your information is incredibly valuable and will only be used as outlined at the beginning of this survey. If you have any concerns or queries regarding this research program, please contact student researcher Benjamin Kropf at a1668294@student.adelaide.edu.au

