# The impact of a Student vs Worker identity on work-study conflict and facilitation in university students.

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#### **Abstract**

Students enrolled at two Australian universities were surveyed about their work and study demands, their control over their job and work schedule, and their levels of work-study conflict and work-study facilitation. While they were completing both university studies and paid employment, their primary identity was either as a student (n = 908) or as a worker (n = 486). Average scores on all measures were significantly different between those whose primary identity was as a student (who works) or a worker (who studies). The demographic variables also showed that those with the student identity worked fewer hours and were considerably younger than those with the worker identity. The four predictor variable significantly predicted work-study conflict and work-study facilitation for both identities. Implications are discussed in terms of the development of their identity.

## Introduction

Tertiary students in Australia are undertaking increasing amounts of work during their studies but are still struggling to meet the financial costs of studying (Devlin, James, & Grigg, 2008). While students' annual incomes are rising, the level of government support is declining (Devlin et al., 2008). A likely outcome of this trend towards increased working is that students may be less engaged in their studies with a greater priority given to earning money over studying (Devlin et al., 2008).

The Job Demands-Resources (JD-R) and Work-Home Resources (W-HR) literature provides an enormous platform for understanding contributors to employee engagement and burnout, and it has recently been extended to the study domain (Calderwood & Gabriel, 2017; Cinamon, 2018; Creed, French, & Hood, 2015). Owens, Kavanagh, and Dollard (2018) also drew on the JD-R literature to develop a conceptual framework called the "work-to-study model" (p. 505). These studies suggest that there are dual processes operating with important roles for both work-study conflict (W-SC) and work-study facilitation (W-SF) in mediating the impact of a range of antecedents on students' health and academic outcomes.

Park and Headrick (2017) summarised the literature and grouped the antecedents of W-SC and W-SF into three types: work-related predictors, nonwork/school predictors, and individual predictors. Outcomes of W-SC and W-SF were also grouped into three types: work-related outcomes, school-related outcomes, and individual-related outcomes. Moderators were

identified as individual characteristics, situation characteristics, and demographic characteristics. The complexity of capturing the influence of different types of predictors on different types of outcomes, with different moderators, while simultaneously considering the dual pathways (W-SC and W-SF) presents a challenge for researchers. Park and Headrick (2017) also highlighted that much of the previous research has been conducted using "traditional" college student samples, with "non-traditional" students being largely ignored. They suggested that "non-traditional" students tend to be older, have dependents besides a spouse, and have delayed commencing their tertiary studies.

The current research into W-SC and W-SF is the initial and somewhat exploratory phase of a three-year longitudinal study across two universities, one with a focus on school leavers and the other with the focus on the non-school leaver student. The current study included both W-SC and W-SF as two key indicators of students' experience of working and studying. The predictors of W-SC and W-SF included two types of demands and two types of resources (work-related and study-related). The initial model included a measure of primary identity (either as a student or as a worker), as well as other demographic questions. We then examined whether the student and worker identities differed in their demographic responses, as well as the possible differences between the two universities and the respondents' gender.

The importance of identity development is also central to many higher education frameworks. An emphasis on "learning as becoming" points to the critical role of higher education in facilitating students' awareness of their own development as a professional, scientist, or scholar (Carroll et al., 2018). It was expected that the primary identity that is reported would assist in explaining differences in the antecedents of W-SC and W-SF, as well as in the levels of W-SC and W-SF. We considered that "non-traditional" students would be more likely to adopt the worker identity as their primary identity, while "traditional" students would be more likely to adopt the student identity.

### Method

## Participants:

The participants were recruited from two universities using an online survey. Demographic characteristics for the whole sample are shown in Table 1. Table 2 shows how the respondents differed according to their primary identity (student or worker). Table 3 shows the demographics for each university, and Table 4 shows the demographics each gender.

Analyses of the demographic variables showed that those with the student identity worked many fewer hours (mean hours of 16.95 vs 35.78) and were considerably younger (mean age of 21.46 vs 32.64) than those with the worker identity. There were also significant differences in mean work hours between the two universities (mean hours of 19.56 vs 32.27) and between females and males (mean hours of 22.09 vs 25.15). Finally, the average age was significantly different between the universities (mean age of 23.12 vs 32.16) and between females and males (mean age of 24.97 vs 27.06).

| Characteristic                    | N = 1461          | %    |
|-----------------------------------|-------------------|------|
| Age (M, SD)                       | 25.54 (SD=9.74)   |      |
| Missing cases                     | 263               |      |
| Work hours per week (M, SD)       | 23.58 (SD =12.47) |      |
| Missing cases                     | 8                 |      |
| Gender                            |                   |      |
| Female                            | 877               | 72.4 |
| Male                              | 334               | 27.6 |
| Other                             | 1                 | .1   |
| Missing cases                     | 249               |      |
| Identity                          |                   |      |
| Student                           | 908               | 63.9 |
| Worker                            | 486               | 34.0 |
| Other                             | 67                | 2.0  |
| Missing cases                     | 41                |      |
| Type of student                   |                   |      |
| Domestic                          | 1162              | 96   |
| International                     | 29                | 2.4  |
| Other                             | 20                | 1.6  |
| Missing cases                     | 250               |      |
| Degree type                       |                   |      |
| Undergraduate                     | 1088              | 89.8 |
| Postgraduate certificate/diploma  | 50                | 4.1  |
| Masters                           | 49                | 4.0  |
| Other                             | 24                | 1.4  |
| Missing cases                     | 250               |      |
| Cultural background               |                   |      |
| Australian/mixed Australian       | 990               | 81.8 |
| Indigenous/Torres Strait Islander | 15                | 1.2  |
| Non-Australian                    | 206               | 17   |
| Missing cases                     | 250               |      |
| Economic situation                |                   |      |
| Living comfortably                | 374               | 31.0 |
| Coping on present income          | 551               | 45.6 |
| Difficult on present income       | 226               | 18.7 |
| Very difficult on present income  | 57                | 4.7  |
| Missing cases  Table 1. Demograph | 253               |      |

Table 1. Demographic characteristics of survey sample.

| Characteristic                    | Student (n=908)   | %    | Worker (n=486)   | %    |
|-----------------------------------|-------------------|------|------------------|------|
| Age (M, SD)**                     | 21.46 (SD=6.29)   |      | 32.64 (SD=10.42) |      |
| Missing cases                     | 131               |      | 113              |      |
| Work hours per week (M, SD)**     | 16.95 (SD = 7.67) |      | 35.78 (SD=10.19) |      |
| Missing cases                     | 1                 |      | 2                |      |
| Gender                            |                   |      |                  |      |
| Female                            | 574               | 73.6 | 261              | 68.9 |
| Male                              | 206               | 26.4 | 117              | 30.9 |
| Other                             |                   |      | 1                | .3   |
| Missing cases                     | 128               |      | 107              |      |
| Type of student                   |                   |      |                  |      |
| Domestic                          | 747               | 95.8 | 365              | 96.6 |
| International                     | 26                | 3.3  | 2                | 0.5  |
| Other                             | 7                 | 0.9  | 11               | 2.8  |
| Missing cases                     | 128               |      | 108              |      |
| Degree type                       |                   |      |                  |      |
| Undergraduate                     | 743               | 95.3 | 297              | 78.6 |
| Postgraduate certificate/diploma  | 8                 | 1.0  | 40               | 10.6 |
| Masters                           | 15                | 1.9  | 32               | 8.5  |
| Other                             | 14                | 1.8  | 9                | 2.4  |
| Missing cases                     | 128               |      | 108              |      |
| Cultural background               |                   |      |                  |      |
| Australian/mixed Australian       | 637               | 81.8 | 312              | 82.3 |
| Indigenous/Torres Strait Islander | 7                 | 0.9  | 5                | 1.6  |
| Non-Australian                    | 135               | 17.3 | 61               | 16.1 |
| Missing cases                     | 129               |      | 107              |      |
| Economic situation                |                   |      |                  |      |
| Living comfortably                | 202               | 26.0 | 157              | 41.6 |
| Coping on present income          | 368               | 47.3 | 160              | 42.4 |
| Difficult on present income       | 161               | 20.7 | 53               | 14.1 |
| Very difficult on present income  | 47                | 6.0  | 7                | 1.9  |
| Missing cases                     | 130               |      | 109              |      |

Table 2. Demographic characteristics of survey sample by identity.

| Characteristic                    | First Uni (n=998) | %    | Second Uni (n=463) | %    |
|-----------------------------------|-------------------|------|--------------------|------|
| Age (M, SD)**                     | 23.12 (SD=8.32)   |      | 32.16 (SD=10.27)   |      |
| Missing cases                     | 117               |      | 141                |      |
| Work hours per week (M, SD)**     | 19.56 (SD=10.37)  |      | 32.27 (SD=12.18)   |      |
| Missing cases                     | 2                 |      | 1                  |      |
| Gender                            |                   |      |                    |      |
| Female                            | 652               | 73.8 | 225                | 68.4 |
| Male                              | 230               | 26.0 | 104                | 31.6 |
| Other                             | 1                 | 0.1  | 0                  |      |
| Missing cases                     | 115               |      | 134                |      |
| Identity                          |                   |      |                    |      |
| Student                           | 785               | 78.7 | 123                | 26.6 |
| Worker                            | 185               | 18.5 | 301                | 65.0 |
| Other                             | 28                | 2.8  | 39                 | 8.3  |
| Missing cases                     | 0                 |      | 0                  |      |
| Type of student                   |                   |      |                    |      |
| Domestic                          | 849               | 96.1 | 313                | 95.4 |
| International                     | 26                | 2.9  | 3                  | 0.9  |
| Other                             | 8                 | 0.8  | 12                 | 3.6  |
| Missing cases                     | 115               |      | 135                |      |
| Degree type                       |                   |      |                    |      |
| Undergraduate                     | 800               | 90.6 | 288                | 87.8 |
| Postgraduate certificate/diploma  | 40                | 4.5  | 10                 | 3    |
| Masters                           | 26                | 2.6  | 23                 | 7    |
| Other                             | 17                | 1.7  | 7                  | 2.1  |
| Missing cases                     | 115               |      | 135                |      |
| Cultural background               |                   |      |                    |      |
| Australian/mixed Australian       | 721               | 81.7 | 269                | 82   |
| Indigenous/Torres Strait Islander | 10                | 1.1  | 5                  | 1.5  |
| Non-Australian                    | 142               | 17.2 | 54                 | 16.5 |
| Missing cases                     | 115               |      | 135                |      |
| Economic situation                |                   |      |                    |      |
| Living comfortably                | 243               | 27.6 | 131                | 39.9 |
| Coping on present income          | 426               | 48.4 | 125                | 38.1 |
| Difficult on present income       | 163               | 18.5 | 63                 | 19.2 |
| Very difficult on present income  | 48                | 5.5  | 9                  | 2.7  |
| Missing cases                     | 118               |      | 135                |      |

Table 3. Demographic characteristics of survey sample by university.

| Characteristic                    | Female (n=877)   | %    | Male (n=334)     | %    |
|-----------------------------------|------------------|------|------------------|------|
| Age (M, SD)**                     | 24.97 (SD=9.56)  |      | 27.06 (SD=10.10) |      |
| Missing cases                     | 8                |      |                  |      |
| Work hours per week (M, SD)**     | 22.09 (SD=11.41) |      | 25.15 (SD=13.99) |      |
| Missing cases                     | 8                |      | 2                |      |
| Type of student                   |                  |      |                  |      |
| Domestic                          | 843              | 96.1 | 318              | 95.5 |
| International                     | 18               | 2.1  | 11               | 3.3  |
| Other                             | 16               | 1.8  | 4                | .3   |
| Missing cases                     | 0                |      | 1                |      |
| Degree type                       |                  |      |                  |      |
| Undergraduate                     | 790              | 90.1 | 298              | 89.5 |
| Postgraduate certificate/diploma  | 38               | 4.3  | 12               | 3.6  |
| Masters                           | 33               | 3.8  | 15               | 4.5  |
| Other                             | 16               | 1.4  | 8                | 2.4  |
| Missing cases                     | 0                |      | 1                |      |
| Cultural background               |                  |      |                  |      |
| Australian/mixed Australian       | 728              | 83.1 | 261              | 78.1 |
| Indigenous/Torres Strait Islander | 13               | 1.5  | 2                | 0.6  |
| Non-Australian                    | 135              | 15.4 | 71               | 21.3 |
| Missing cases                     | 1                |      | 0                |      |
| Economic situation                |                  |      |                  |      |
| Living comfortably                | 248              | 28.3 | 126              | 38.1 |
| Coping on present income          | 407              | 46.5 | 143              | 43.2 |
| Difficult on present income       | 175              | 20.0 | 51               | 15.4 |
| Very difficult on present income  | 6                | 5.3  | 11               | 3.3  |
| Missing cases                     |                  |      | 3                |      |

Table 4. Demographic characteristics of survey sample by gender.

#### Measures:

Job demands was assessed with nine items from the Psychological Job Demands Scale (e.g., "There is excessive work to do"), which is contained in the Job Content Questionnaire (Karasek et al., 1998). The Cronbach alpha in the current study was .86.

Study demands was assessed using a six-item scale (e.g., "I cannot ever seem to catch up with study") derived from the role overload scale reported in Thiagarajan, Chakrabarty, and Taylor (2006). The Cronbach alpha in the current study was .87.

Job control was captured by three items (e.g., "How often do you have control over what happens on your job?") from Butler (2007). In addition, a five-item measure of Work-Study Role Conflict (e.g., "Because of my job, I go to university tired") and a five-item measure of Work-Study Role Facilitation (e.g., "The things I do at work help me deal with personal and practical issues at university") also were drawn from Butler (2007). The Cronbach alphas for these three scales in the current study were .85, .87, and .83 respectively.

Finally, a measure of schedule control, drawn from Henly and Lambert (2014), and containing four items (e.g., "How much control do you have over the number of hours you work each week") assessed the degree of input into the work schedule. Cronbach alpha in the current study was .78.

## **Results**

Means, standard deviations, and inter-correlations for the six scales are reported in Table 5. The differences between those with a student identity and those with a worker identity are reported in Table 6. The upper diagonal shows the inter-correlations for the student identity, while the lower diagonal shows the inter-correlations for the worker identity.

A multivariate ANOVA assessed the initial question as to whether the scores differed between the student identity and the worker identity, when considered as a multivariate composite. This comparison was significant (F = 75.40, df = 6, 1193, p < .001, partial  $\eta^2 = .28$ ). Univariate tests confirmed that scores on the six scales were significantly different between student and worker identity, with p < .001 and partial  $\eta^2$  ranging from .01 to .10.

In addition, work-study conflict and work-study facilitation were each regressed on the other four variables to determine the extent to which they were predicted by a linear combination of the four measures. The results for work-study conflict for those with the student identity were significant with R = .65, Adj  $R^2 = .42$ , F = 144.70, df = 4, 795, p < .001. Each predictor added significant unique variance. The results for work-study facilitation for those with the student identity were R = .31, Adj  $R^2 = .09$ , F = 21.44, df = 4, 793, p < .001. Apart from study demands, each predictor contributed unique variance.

The results for work-study conflict for those with the worker identity were significant with R = .65, Adj  $R^2 = .42$ , F = 74.70, df = 4, 405, p < .001. Only work demands and study demands contributed unique variance. The results for work-study facilitation for those with the worker identity were significant with R = .33, Adj  $R^2 = .10$ , F = 12.08, df = 4, 394, p < .001. Only work demands and job control added unique variance.

| Scales                     | M     | SD   | Range | 1     | 2     | 3     | 4     | 5  |
|----------------------------|-------|------|-------|-------|-------|-------|-------|----|
| 1. Job demands             | 31.21 | 7.25 | 9-45  | 1     |       |       |       | _  |
| 2. Study demands           | 19.05 | 6.06 | 6-30  | .45** | 1     |       |       |    |
| 3. Job control             | 8.52  | 3.42 | 3-15  | 09**  | 10**  | 1     |       |    |
| 4. Schedule control        | 8.21  | 3.32 | 3-15  | 19**  | 17**  | .45** | 1     |    |
| 5. Work-study conflict     | 19.61 | 6.00 | 5-30  | .41** | .62** | 19**  | 27**  | 1  |
| 6. Work-study facilitation | 18.04 | 5.69 | 5-30  | .16** | .03   | .31** | .11** | 00 |

Table 5. Overall Mean and Standard Deviation scores for each scale and inter-correlations. \*\* p < .01

|                            | Stude  | ent  | Worke   | er   |       |       |       |       |       |       |
|----------------------------|--------|------|---------|------|-------|-------|-------|-------|-------|-------|
|                            | (n=80) | 01)  | (n=399) | 9)   |       |       |       |       |       |       |
| Scales                     | M      | SD   | M       | SD   | 1     | 2     | 3     | 4     | 5     | 6     |
| 1. Job demands             | 29.94  | 7.27 | 33.78   | 6.48 |       | .40** | 07    | 13**  | .34** | .17** |
| 2. Study demands           | 18.51  | 6.07 | 20.14   | 5.91 | .46** |       | 11*   | 16**  | .63** | 02    |
| 3. Job control             | 8.24   | 3.33 | 9.07    | 3.54 | 15**  | 12**  |       | .52** | 19**  | .27** |
| 4. Schedule control        | 8.75   | 3.04 | 7.13    | 3.60 | 14**  | 15**  | .46** |       | 23**  | .15** |
| 5. Work-study conflict     | 18.32  | 5.94 | 22.18   | 5.26 | .36** | .61** | 25**  | 22**  |       | 07    |
| 6. Work-study facilitation | 16.75  | 5.34 | 20.62   | 5.49 | .07   | 01    | .28** | .20** | 17**  |       |

Table 6. Mean and Standard Deviation scores and inter-correlations by identity. \* p < .05, \*\* p < .01. Inter-correlations for worker identity are above diagonal, study identity are below.

## **Discussion**

The current study was part of a much larger multi-year project that is focused on the ways that tertiary students who are working manage the boundaries between their work and studies. The conceptual model reported by Park and Headrick (2017) highlighted the critical mediating role of both work-study conflict and work-study facilitation, and the focus on this paper was on the important role that the student/worker's primary identity plays. Differences in the antecedents of W-SC and W-SF were found such that those with a worker identity reported greater levels of demands, and greater job control (but lower schedule control). Differences were also found in the levels of W-SC and W-SF, which were both greater for those with a worker identity.

It is important to better understand the nature of the demands and available resources that students are experiencing, as there may be strategies that can be adopted to better manage their competing priorities. The type of management strategies may be influenced by their primary identity with the students (who work), favouring strategies that minimise the level of W-SC, while the workers (who study) may favour strategies that enhance W-SF. The students who are working longer hours tended to be the older students and to have the "worker" identity.

The link between W-SC and W-SF is still unclear, with some studies finding no connection, some finding a small positive correlation, and some finding a small negative correlation (Park & Headrick, 2017). There may also be important moderators of the relationships between the antecedents included in this study and both W-SC and W-SF, such as the type of degree program being undertaken, the density of the enrolment (i.e., full-time vs part-time), and whether the participant has previously studied.

The value of this research is substantial in an environment of decreasing resources to the tertiary sector and a greater emphasis on the employment outcomes for students (Choo, Kan & Cho, 2019). While a student who is working will have gained valuable experience at the completion of their degree, there may be some employment experiences that are detrimental to the students' academic outcomes and personal level of well-being. The current study is attempting to identify the optimal management strategies across a student's degree program whilst recognising that there may be important differences between the "traditional" and "non-traditional" students.

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