Are students who do not participate in work-integrated learning (WIL) disadvantaged? Differences in work self-efficacy between WIL and non-WIL students

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If work-integrated learning (WIL) improves students’ work self-efficacy (WSE), are students who do not participate in WIL disadvantaged? This study answers this question by examining differences in WSE between final-year criminal justice students at Griffith University (Brisbane, Australia) who elected to undertake WIL and those who did not. Contrary to expectations, WIL students did not report higher WSE upon the completion of a work placement compared to non-WIL students. Further investigations revealed pre-existing differences between the two groups, whereby students who elected to undertake WIL had significantly lower levels of WSE prior to placement than students who chose not to undertake a placement. These students were also significantly younger and less likely to have had prior criminal justice work experience. Findings highlight the importance of offering WIL as an elective to give students with lower levels of WSE the opportunity to develop greater confidence in managing the professional workplace. (Asia-Pacific Journal of Cooperative Education, 2016, 17(1), 9-20)

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Research suggests that students who complete work-integrated learning (WIL) placements experience significant improvements in work self-efficacy (WSE) (M. Bates, Thompson, & Bates, 2013; Raelin et al., 2011). That is, an increased confidence in their ability to manage workplace experiences (M. Bates et al., 2013; Raelin et al., 2011). This is important because higher levels of self-efficacy are associated with more successful transitions from study to work (Pinquart, Juang, & Silbereisen, 2003) and better workplace performance and success (Stajkovic & Luthans, 1998). Since many WIL programs are electives (Stichman & Farkas, 2005), it is important to identify if students who do not undertake WIL experiences are missing a valuable educational opportunity. This paper examines whether final year criminal justice students who complete WIL placements have higher levels of WSE, and thus feel better equipped for employment upon graduation, than final year criminal justice students who choose not to complete WIL.

WIL placements offer students the opportunity to undertake work within a professional occupational setting related to their degree (Purdie, McAdie, King, & Ward, 2011). The role of WIL is to help students transition from being a dependent learner within their university institution into an autonomous professional practitioner (A. Bates, Bates, & Bates, 2004; A. Bates, Bates, & Bates, 2007) by assisting students to link the theoretical knowledge that they learned at university with the realities of the workplace (L. Bates, 2005). In doing so, WIL placements help students develop both personally and professionally (Purdie et al., 2011). WIL programs are increasingly being incorporated into higher education degrees (Smith & Worsfold, 2015) and are used within a variety of disciplines at the tertiary level (e.g., business, social work, nursing, teaching, psychology, environmental science and criminal justice; M. Bates, 2003). Although WIL placements are usually compulsory in some disciplines (e.g., teaching, nursing), WIL is often an elective in other disciplines (e.g.,

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criminology and criminal justice, exercise science; M. Bates et al., 2013; Reddan & Rauchle, 2012). To illustrate, Stichman and Farkas (2005) identified that, while WIL placements are offered in 87.8% of universities with criminal justice majors, 81.4% of these placements were electives. Moreover, WIL placements were undertaken by a minority of students. Although more than 50% of criminal justice programs had greater than 300 students, in 75% of cases fewer than 20 students undertook WIL placements in any one semester (Stichman & Farkas, 2005). But what are the benefits of WIL placements for those students who elect to participate?

**BENEFITS OF WIL PLACEMENTS**

The benefits associated with WIL placements appear wide-reaching. Research indicates that WIL placements have the potential to assist students to combine the range of knowledge and skills they have gained within their tertiary studies (McNamara et al., 2012) and is associated with increased levels of hope and self-esteem (Purdie et al., 2011). Additionally, research suggests that WIL placements can increase students’ awareness of work settings, foster their generic skills and abilities, as well as involve students in experiences that strengthen their work-ready attitudes and behaviors (e.g. A. Bates & Bates, 2013; Crebert, Bates, Bell, Patrick, & Cragnolini, 2004; Dressler & Keeling, 2011; Drysdale & McBeath, 2014; Freudenberg, Brimble, & Cameron, 2011; Jackson, 2013; Universities Australia, 2008). Of particular relevance to this research, are the advantages of WIL placements on enhancing students’ WSE (M. Bates et al., 2013; Raelin et al., 2011).

Self-efficacy is an individual’s perception of "how well [he/she] can execute courses of action required to deal with prospective situations" (Bandura, 1982, p. 122). A plethora of research supports a strong, positive relationship between self-efficacy and workplace performance (e.g., Stajkovic & Luthans, 1998) and job satisfaction (e.g., Abele & Spurk, 2009). For example, higher levels of self-efficacy are related to more successful transitions from study to work (e.g., Pinquart et al., 2003), more successful career outcomes (e.g., Bandura, 1986, 1997; Barling & Beattie, 1983; Eden & Zuk, 1995; Taylor, Locke, Lee, & Gist, 1984) and more successful career advancements (e.g., Abele & Spurk, 2009). Thankfully, self-efficacy is not fixed, but can be acquired through mechanisms such as personal experience, explanation, observing the behaviors of others, limiting pressures that may lead to early failure and on-the-job demonstration, practice and feedback (Aryee & Chu, 2012; Bandura, 1977, 1986, 1997; Gist & Mitchell, 1992; Raelin et al., 2011).

Given these mechanisms for improving self-efficacy, it is perhaps not surprising that there is strong evidence that WIL placements enhance students’ general levels of self-efficacy (Coll, Zegwaard, & Lay, 2001; Freudenberg, Brimble, & Cameron, 2010; Freudenberg, Brimble, Cameron, & English, 2011; Subramaniam & Freudenberg, 2007; although findings are mixed for academic self-efficacy; Raelin et al., 2011; Purdie et al., 2011). Recently, research also suggests that WIL programs enhance students’ work-related self-efficacy specifically (M. Bates et al., 2013; Raelin et al., 2011). That is, an individual’s beliefs about his/her competency in managing the social requirements that are essential for success within the workplace (Raelin et al., 2011), including problem-solving, sensitivity, teamwork, learning, politics, pressure and role expectations. However, the quality of the work placement is important, with students who had a chance to make a difference, be part of a team and apply knowledge from their studies reporting greater improvements in WSE (Raelin et al., 2011).
The improvements in WSE also vary across the different dimensions of WSE. Research conducted by M. Bates, Thompson, and L. Bates (2013) demonstrated significant improvements in criminal justice WIL students’ WSE across problem solving, managing organizational politics, understanding their role within the workplace, and dealing with stress. While students did not report significant improvements across the dimensions of learning, teamwork, and sensitivity (M. Bates et al., 2013), students still reported ‘a lot’ of self-efficacy in each of these three areas. Therefore, their placement experience arguably reinforced their perceived levels of competence across these dimensions. Additionally, students also reported an overall improvement in WSE. Together, the improvements in overall WSE, and the majority of the WSE dimensions, raises the question of whether students who participate in WIL are better equipped for post-graduate employment than those students who do not participate in WIL.

THE CURRENT STUDY

Despite well documented advantages for participating in WIL, many students elect not to participate in WIL placements (Stichman & Farkas, 2005). Given the importance of self-efficacy for the transition to employment or new organizational contexts, it is important to investigate whether criminal justice students who participate in WIL believe they are better equipped to manage workplace experiences at graduation (i.e., greater WSE) compared with criminal justice students who do not complete WIL placements. This is the focus of the present study. It was hypothesized that WIL students would have higher levels of WSE at the completion of their placement compared with students who do not choose to complete a WIL placement.

METHOD

Participants

Two student samples were recruited for the present study. Both samples were obtained from Griffith University’s School of Criminology and Criminal Justice (Brisbane, Australia). First, 33 final-year undergraduate criminal justice students were recruited from a criminal justice WIL course. The sample constituted 86.8% of all WIL enrolments. The WIL sample comprised 81.8% female students and 18.2% male students. Participants were aged between 19 and 38 years ($M = 22.8$ years, $SD = 3.7$). Second, a comparison group of 18 final-year criminal justice students who had not undertaken WIL was recruited (77.8% female, 22.2% male), representing one third of all graduates who did not complete WIL placements. The ages of these participants ranged from 20 to 41 years ($M = 27.3$ years, $SD = 7.0$). Examination of the characteristics of the comparison group indicated that the comparison group was representative of typical graduates from Griffith University’s School of Criminology and Criminal Justice (see also Wimshurst & Allard, 2007a, 2007b). The WIL student participants were also representative of students who undertake WIL at Griffith University’s School of Criminology and Criminal Justice (see also M. Bates, 2004; M. Bates et al., 2013).

The WIL student sample and the comparison group did not significantly differ in sex ($\chi^2[1, N = 51] = 0.12, p = 0.73, \phi = -.05$) and general work experience (WIL sample prior to placement = 75.0%; comparison sample = 61.1%) ($\chi^2[1, N = 42] = 0.93, p = 0.34, \phi = -.14$). However, the comparison sample was significantly older than the WIL student sample ($t[22.11] = 2.55, p = .02, d = .80$) and were significantly more likely to have undertaken work experience in the field of criminology and criminal justice ($n = 10; 55.6\%$) than the WIL student sample prior to
placement \((n = 3; 12.5\%)\), \((\chi^2 [1, N = 42] = 8.92, p = .003, \phi = -.46)\). Both age \((r = .47, p < .002)\) and previous criminal justice work experience \((t[40] = -2.72, p = .01)\) were significantly associated with WSE ratings, whereby older students and those with previous criminal justice work experience had greater WSE.

**WIL Course**

The WIL course undertaken by students in the current study has been described in detail elsewhere (see M. Bates, 2008; M. Bates et al., 2013). This WIL course is offered as an elective for final year students in the School of Criminology and Criminal Justice at Griffith University (Brisbane, Australia). The WIL placements extend for one day per week for 13 weeks in students’ final semester of study, equating to approximately 100 hours of work experience. Students undertake placements in a variety of criminology and criminal justice organizations commensurate with their interests and employment goals. This includes traditional criminal justice placements such as policing, corrections, courts, non-police law enforcement, intelligence, investigations, crime prevention and criminal justice oversight. Students also undertake placements in social justice organizations such as youth justice, child protection, forensic mental health and drug and alcohol issues. Students are interviewed by the convening staff prior to undertaking placements to discuss their areas of interest, preferred organizations for placement, their perceived strengths and weaknesses and their placement goals. Subsequently, the convening staff arranges students’ placements, commensurate with the students’ preferences and abilities. Prior to commencing placement, students are interviewed by the placement organization to ensure an adequate fit between the student and the organization.

Although the nature of the placement necessarily varies across organizations, all students are required to complete a written project or practical task for their organization. Students receive support from a number of sources throughout their placements, including a placement supervisor within the organization, an academic facilitator from the School of Criminology and Criminal Justice and four university-facilitated reflective workshops held at key points throughout the placement (i.e., beginning, week 5, week 9 and completion). Students are required to develop a learning plan, in consultation with their organizational supervisor, to guide their experience, as well as maintain a reflective learning journal to enhance their experiential learning. While there are differences in the nature of WIL courses within and across universities (and countries), there are numerous structural and organizational similarities between the WIL course examined in this study and many WIL courses in the United States of America and elsewhere (e.g., M. Bates, 2008; Stichman & Farkas, 2005).

**Materials**

Work self-efficacy was measured using an anonymous questionnaire. The self-report questionnaire was two pages in length and was completed in 10 minutes. The questionnaire comprised two sections. The first section assessed participants’ age, sex, and previous work experience (including whether they had any work experience in the criminology and criminal justice field).

The second section measured participants’ self-reported WSE using Raelin’s (n.d.) Work Self-Efficacy Inventory (WS-Ei). This 30-item inventory assesses WSE across seven dimensions: learning (e.g., continue to learn once I’m on the job), problem solving (e.g., solve most problems even though initially no solution is immediately apparent), teamwork (e.g.,
develop cooperative working relationships with others), sensitivity (e.g., listen effectively to understand opposing points of view), politics (e.g., understand the politics in an organization), pressure (e.g., work well in situations that other people consider stressful) and role expectations (e.g., determine what is expected of me on a job). Participants’ confidence in their ability to perform each workplace activity is scored on a five-point scale (1 = not at all, 2 = a little, 3 = a moderate amount, 4 = a lot and 5 = completely). Participants’ WSE ratings were computed for each dimension using the mean score of all items for the corresponding dimension, yielding a score between one and five for each dimension. Overall WSE was computed using the mean score of all 30 items in the scale, with an overall score between one and five. The construct validity and internal consistency of the WS-E has been supported in previous research (Raelin, n.d; Raelin et al., 2011) (Cronbach’s alpha = .94). In this study, the Cronbach’s alpha coefficients exceeded .7 for all seven dimensions and exceeded .95 for the total scale.

Procedure

The WIL student sample was recruited from the final-year undergraduate criminal justice course described above. The questionnaire was administered at two time-points; the pre-test questionnaire was administered before the commencement of the WIL placement and the post-test questionnaire was administered once the placement was completed. Participants’ pre-test and post-test scores were matched using a unique identification code. The response rate was 63.2% (n = 24) for the pre-test questionnaire and 86.8% (n = 33) for the post-test questionnaire.

The comparison student sample was recruited through a student email distributed to the cohort of final-year undergraduate criminal justice students who did not undertake a WIL placement. The comparison students were administered the questionnaire at the completion of their final semester of undergraduate study. The response rate for the comparison sample was 32.3%. Although the response rate for the survey was modest, it is comparable to previous surveys of graduates from Griffith University’s School of Criminology and Criminal Justice (e.g., Wimshurst & Allard, 2007a) as well as studies using similar methodologies elsewhere, (e.g., United States; Kaplowitz, Hadlock, & Levine, 2004; Sax, Gilmartin, & Bryant, 2003). Moreover, as mentioned previously, the demographic characteristics of those students who did participate were representative of graduates from School of Criminology and Criminal Justice. This research was approved by the Griffith University Human Research Ethics Committee (CCJ/05/08/HREC) and all participants were treated according to the governing ethical principles.

Analyses

WSE ratings were examined between WIL students and a comparison group of non-WIL students using a series of t-tests and analyses of covariance (ANCOVAs). A series of bivariate analyses such as this is consistent with Tabachnick and Fidell’s (2001) guidelines for analyzing factor/component scores (as opposed to using multivariate analyses such as MANOVA and MANCOVA). Despite the small sample size, power analyses indicated that power was sufficient (i.e., 80% and over) for small-to-moderate effect sizes. Nevertheless, given the impact of sample sizes on significance testing, effect sizes will be reported to demonstrate the magnitude of relationships (see Levine & Hullett, 2002).
RESULTS

Do Final-Year WIL Students have Higher Ratings of Work Self-Efficacy at the Completion of Placements Compared with Final-Year Students who do not Choose to Complete WIL?

A series of ANCOVAs were computed to assess whether WIL students had higher ratings of WSE after their placement experience (n = 33) compared with comparison students who chose not to participate in WIL (n = 18). Age was entered as a covariate in the analyses, since the comparison student sample was significantly older than the WIL student sample and an older age was associated with higher levels of WSE. Bonferroni’s correction was not utilized in light of criticisms that this adjustment increases type II errors, particularly in studies with small samples and modest power (Nakagawa, 2004; Perneger, 1998). Contrary to our hypothesis, the results revealed that WIL students did not have higher levels of WSE at the completion of placements compared to the comparison sample. Instead, there were no statistically significant differences between WIL and comparison students on overall WSE and five of the seven individual dimensions (see Table 1). Moreover, for two dimensions, the comparison group actually had higher levels of WSE; that is for learning and teamwork. The mean scores reported in Table 1 are somewhat misleading when interpreting differences across the groups due to the need to control for differences in age. Nevertheless, it can be deduced that both WIL placement students and the comparison students reported ‘a lot’ or ‘moderate’ to ‘a lot’ of self-efficacy across all seven factors and ‘moderate’ to ‘a lot’ of overall WSE. The lack of a statistically significant difference between WIL students and the comparison students at the completion of the placement (particularly since previous research has demonstrated the benefits of WIL for WSE) begs the question of whether there were differences in levels of WSE between these two groups before the placements commenced. This was addressed in a subsequent series of analyses.

<table>
<thead>
<tr>
<th>Self-Efficacy Factor</th>
<th>Post-Placement M (SD)</th>
<th>Comparison Sample M (SD)</th>
<th>df</th>
<th>F</th>
<th>p</th>
<th>η²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning</td>
<td>3.9 (0.6)</td>
<td>4.4 (0.5)</td>
<td>1, 48</td>
<td>5.79</td>
<td>.020</td>
<td>.09</td>
</tr>
<tr>
<td>Problem-Solving</td>
<td>3.5 (0.7)</td>
<td>3.7 (0.7)</td>
<td>1, 48</td>
<td>0.01</td>
<td>.947</td>
<td>.00</td>
</tr>
<tr>
<td>Teamwork</td>
<td>3.5 (0.9)</td>
<td>4.2 (0.6)</td>
<td>1, 48</td>
<td>5.53</td>
<td>.023</td>
<td>.09</td>
</tr>
<tr>
<td>Sensitivity</td>
<td>3.9 (0.6)</td>
<td>4.3 (0.7)</td>
<td>1, 48</td>
<td>2.31</td>
<td>.135</td>
<td>.04</td>
</tr>
<tr>
<td>Politics</td>
<td>3.6 (0.7)</td>
<td>3.9 (0.6)</td>
<td>1, 48</td>
<td>0.19</td>
<td>.663</td>
<td>.00</td>
</tr>
<tr>
<td>Pressure</td>
<td>3.8 (0.8)</td>
<td>4.0 (0.7)</td>
<td>1, 48</td>
<td>0.04</td>
<td>.836</td>
<td>.00</td>
</tr>
<tr>
<td>Role Expectations</td>
<td>3.8 (0.8)</td>
<td>4.3 (0.7)</td>
<td>1, 48</td>
<td>2.27</td>
<td>.139</td>
<td>.04</td>
</tr>
<tr>
<td>Overall Work Self-Efficacy</td>
<td>3.7 (0.6)</td>
<td>4.1 (0.5)</td>
<td>1, 48</td>
<td>1.86</td>
<td>.179</td>
<td>.03</td>
</tr>
</tbody>
</table>

Scale: 1 = not at all, 2 = a little, 3 = a moderate amount, 4 = a lot and 5 = completely

*Sample size for post-placement survey was 33.
Were there Differences in Work Self-Efficacy Ratings Between WIL Students and Comparison Students Prior to the Commencement of Placements?

A series of analyses of covariance (ANCOVAs) were run to assess whether there were differences between pre-placement WSE ratings for students who completed WIL (n = 24) and students who chose not to complete WIL (n = 18), after controlling for age. Again, Bonferroni’s correction was not utilized in light of the criticisms mentioned above (Nakagawa, 2004; Perneger, 1998). The results indicated that, after controlling for age, the comparison sample reported higher levels of WSE across all dimensions, including learning (F [1, 39] = 16.59, p = .001, $\eta^2 = .24$), problem-solving (F [1, 39] = 5.57, p = .023, $\eta^2 = .10$), teamwork (F [1, 39] = 16.38, p = .001, $\eta^2 = .25$), sensitivity (F [1, 39] = 7.14, p = .011, $\eta^2 = .14$), politics (F [1, 39] = 17.72, p = .001, $\eta^2 = .24$), pressure (F [1, 39] = 4.14, p = .049, $\eta^2 = .10$), role expectations (F [1, 39] = 15.16, p = .001, $\eta^2 = .10$), and overall WSE (F [1, 39] = 15.92, p = .001, $\eta^2 = .23$). Specifically, students who chose to complete WIL placements reported moderate self-efficacy across most self-efficacy factors, with slightly lower ratings for politics and slightly higher ratings for learning and sensitivity (see Table 2). However, those students who did not choose to complete WIL placements reported ‘a lot’ of self-efficacy across most self-efficacy factors and ‘moderate’ to ‘a lot’ of self-efficacy for problem-solving. Since the comparison sample reported more previous work experience in the criminal justice field, these analyses were repeated, controlling for both age and previous criminal justice experience. The results revealed that, even after controlling for both age and criminal justice experience, the comparison sample still reported more confidence in relation to five of the seven dimensions and overall WSE. Specifically, learning (F [1, 38] = 10.62, p = .002, $\eta^2 = .16$), teamwork (F [1, 38] = 8.95, p = .005, $\eta^2 = .13$), politics (F [1, 38] = 9.68, p = .004, $\eta^2 = .13$), role expectations (F [1, 38] = 7.63, p = .009, $\eta^2 = .12$), sensitivity (F [1, 38] = 4.84, p = .034, $\eta^2 = .097$)

### TABLE 2: Differences in Placement Students’ Pre-Placement Work Self-Efficacy Ratings and the Comparison Students’ Work Self-Efficacy Ratings

<table>
<thead>
<tr>
<th>Self-Efficacy Factor</th>
<th>Pre-Placement a</th>
<th>Comparison Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M (SD)</td>
<td>M (SD)</td>
</tr>
<tr>
<td>Learning</td>
<td>3.6 (0.6)</td>
<td>4.4 (0.5)</td>
</tr>
<tr>
<td>Problem-Solving</td>
<td>3.0 (0.8)</td>
<td>3.7 (0.7)</td>
</tr>
<tr>
<td>Teamwork</td>
<td>3.3 (0.6)</td>
<td>4.2 (0.6)</td>
</tr>
<tr>
<td>Sensitivity</td>
<td>3.7 (0.6)</td>
<td>4.3 (0.7)</td>
</tr>
<tr>
<td>Politics</td>
<td>2.7 (0.8)</td>
<td>3.9 (0.6)</td>
</tr>
<tr>
<td>Pressure</td>
<td>3.4 (0.6)</td>
<td>4.0 (0.7)</td>
</tr>
<tr>
<td>Role Expectations</td>
<td>3.2 (0.8)</td>
<td>4.3 (0.7)</td>
</tr>
<tr>
<td>Overall Self-Efficacy</td>
<td>3.3 (0.6)</td>
<td>4.1 (0.5)</td>
</tr>
</tbody>
</table>

Scale: 1 = not at all, 2 = a little, 3 = a moderate amount, 4 = a lot and 5 = completely

*aSample size for pre-placement survey was 24.

Note: Given different response rates for pre- and post-test surveys (n = 24 and 33, respectively), all analyses in this study were repeated with only those WIL students who completed both surveys. The substantive patterns did not change (results available upon request). Therefore, we can be confident that our findings do reflect variations in the relative differences between WIL and non-WIL students.
and overall WSE ($F [1, 38] = 7.71, p = .009, \eta^2 = .11$). However, there were no longer statistically significant differences between the samples in relation to problem-solving ($F [1, 38] = 1.42, p = .241, \eta^2 = .02$) and pressure ($F [1, 38] = 1.91, p = .175, \eta^2 = .03$). Consequently, age and previous criminal justice work experience could not account for the differences in most self-efficacy ratings across the WIL and comparison samples.

**DISCUSSION**

WIL placements can improve students’ confidence to manage workplace experiences (i.e., WSE; M. Bates et al., 2013; Raelin et al., 2011). While many universities are moving towards the inclusion of compulsory WIL units, WIL programs are still frequently offered as electives and are often undertaken by a minority of graduates (M. Bates et al., 2013; Cooper, Orrell, & Bowden, 2010; Jackson, 2013; Stichman & Farkas, 2005). This raises the question ‘are students who do not participate in WIL disadvantaged upon graduation?’ To address this question, we investigated whether students who participated in WIL had greater WSE upon graduation than students who did not participate in WIL. Contrary to expectations, WIL students did not report higher levels of WSE at the completion of placement than comparison students who did not participate in WIL. Upon graduation, both WIL students and comparison students reported ‘moderate’ to ‘a lot’ or ‘a lot’ of self-efficacy across all seven dimensions and overall WSE. These findings were somewhat surprising given prior evidence of the benefits of WIL for WSE. To further investigate these findings, we directed subsequent analyses to the differences in WSE ratings prior to WIL students’ placement experiences. These comparisons uncovered clear, statistically significant pre-existing differences in WSE ratings between these two groups. Prior to placement, students who elected to participate in WIL generally reported moderate levels of WSE, with slightly lower ratings for politics and slightly higher ratings for learning and sensitivity. In contrast, students who did not choose to participate in WIL generally reported ‘a lot’ of WSE, with slightly lower ratings for problem-solving. Therefore, in this study, WIL may have provided less confident students with the opportunity to ‘catch up’ to other students with greater confidence in managing the professional workplace. Interestingly, similar patterns have been identified in research on general self-efficacy (e.g., Freudenberg et al., 2010; Freudenberg, Brimble, Cameron & English, 2011; although comparable academic self-efficacy ratings have been reported across WIL [post-placement] and non-WIL students, pre-existing differences were not examined; Drysdale & McBeath, 2014; Purdie et al., 2013).

Our findings are important for understanding the needs of both students who partake in WIL and those students who do not. The moderate levels of WSE in final-year WIL students prior to commencing placement demonstrates the need to offer WIL experiences before graduation. Our findings suggest that WIL placements may make criminal justice graduates, who previously lacked the confidence to effectively manage the workplace environment, more competitive upon graduation. Additionally, differences in WSE between students who do and do not have previous criminal justice work experience may be rectified by the provision of WIL. This is important given the significant role of self-efficacy on successful study-to-work transitions (e.g., Pinquart et al., 2003) and workplace performance and success (e.g., Eden & Zuk, 1995; Stajkovic & Luthans, 1998).

At the same time, the greater levels of workplace confidence reported by non-WIL students might explain why these students did not participate in WIL. Fundamental pre-existing differences between WIL and non-WIL students somewhat account for why the latter
students had greater WSE in the first place, including having more career experience in a criminal justice environment and being significantly older in age (and thus likely to have more career experience more generally). Indeed, after controlling for age and prior criminal justice experience, there were no statistically significant differences between the two groups on problem solving and pressure. However, there were still statistically significant pre-existing differences across most dimensions of WSE. It is possible that this reflects other differences between the samples that were not measured in this study such as length of previous work-experience or differences in individual dispositions or general confidence. Regardless of the origins of these differences, the finding that non-WIL students had greater WSE may explain why the comparison students did not choose to participate in WIL. For example, if we consider the learning sub-scale within the Work Self Efficacy Inventory that refers to a person’s confidence in being able to learn productively on the job, students who have greater levels of confidence to learn once employed may not perceive a need to (or expect lesser benefits from) participating in WIL. As a result, they may be less likely to enroll in this type of course. In contrast, students with lower levels of confidence in their ability to learn on the job may actively be seeking experiences to enhance their ability in this area. The fact that the workplace learning experience that occurs through WIL placements is supported through a range of people and resources may also be appealing to these students.

By making WIL programs an elective, tertiary institutions are recognizing that not all students may benefit from participating in this type of program to the same extent (or may not believe they will benefit to the same extent), at least in the area of WSE. Together, these findings support the inclusion of WIL courses as an elective, at least within criminal justice degrees. Nevertheless, it is worth noting that while the non-WIL group did report ‘a lot’ of WSE without participating in WIL, their scores do indicate that there is still room for improvement. Since research supports the cumulative benefits of multiple work experiences (e.g., Purdie et al., 2011), it is possible that the WSE of these students could still have improved, albeit possibly to a lesser extent than that experienced by WIL students in this study.

Limitations and Directions for Future Research

There is a need for future research to build on the work completed in this study. First, this research considered the development of WSE from a relatively short 100 hour WIL placement undertaken in a criminal justice context. It would be useful to conduct research across a range of disciplines as well as different types of WIL offerings within criminal justice settings (see, for example, pilot research with undergraduate psychology students by L. Bates, Nguyen, Sawhney, & O'Connor, 2014). For instance, some WIL experiences are longer, offer WIL placements at different stages within the degree or have larger courses or different course structures or placement opportunities. It is likely that improvements in WSE will differ across different WIL structures and potentially across different opportunities afforded by WIL placements in different disciplines. Given the restrictions necessary in some criminal justice contexts (e.g., a student in a policing placement may not be able to undertake many of the duties of a police officer due to training requirements and safety), there may be even stronger improvements in different disciplines such as education or nursing where the structure and opportunities of the placements differ. Second, the current sample was derived from a single course within a single university. Replicating these findings in a sample of students from different universities would strengthen external validity. Third, the sample size in this study was small. This research should be replicated in larger samples to
improve generalizability. Still, the sample included more than half of all students in the final-year cohort. Fourth, it would be useful to undertake qualitative research with all WIL stakeholders to explore how WIL placements develop the elements of WSE. This would enable tertiary institutions to develop more effective WIL placements to offer their students.

Fifth, this study considered students who participated in an elective WIL placement and identified that a certain type of student appears to participate in these courses. Therefore, it would be interesting to consider if WSE increased for students enrolled in a compulsory course and how this differs across those with and without previous criminal justice-related work experience and by age. In doing so, the benefits of WIL on students’ WSE can be assessed for those who do and do not have previous criminal justice-related work experience. After all, it is possible that WIL courses further enhance the WSE of students who already have work experience in the criminal justice field, especially given evidence of the cumulative benefits of work-experience (Purdie et al., 2011). Such findings may even build a case for compulsory WIL courses.

Sixth, given that criminal justice WIL courses are frequently offered as electives, it would be interesting to replicate the findings regarding WSE in students who choose not to participate in WIL experiences. Is it the case that non-WIL students across different universities, degrees and countries also do not elect WIL courses because they believe they already have the confidence to manage workplace experiences? If the findings of the current study are replicated, the low rates of participation in criminal justice WIL may be less concerning. However, if this is not the case, it may support a case for compulsory WIL experiences in other institutions.

CONCLUSIONS

Contrary to expectations, WIL students did not report higher WSE upon the completion of placement than non-WIL students. However, this finding does not negate the important role of WIL, whereby further investigations revealed clear pre-existing differences in WSE ratings between these two groups. Specifically, WIL students had significantly lower levels of WSE prior to placement than students who did not choose to undertake a placement. Together, these findings support offering WIL as an elective in criminal justice degrees to give students with lower levels of WSE the opportunity to develop greater confidence in managing the professional workplace, while also recognizing that other students may believe they already have sufficient experience and WSE to successfully transition to the workplace. WIL can provide less experienced and less confident students with the opportunity to ‘catch up’ to other students who may have had greater exposure to professional criminal justice work environments and thus be more competitive to potential employers. Moreover, by enhancing these students’ WSE, WIL courses can foster a smoother transition into the workplace and greater career success for participating graduates.

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The Asia-Pacific Journal of Cooperative Education publishes peer-reviewed original research, topical issues, and best practice articles from throughout the world dealing with Cooperative Education (Co-op) and Work-Integrated Learning/Education (WIL).

In this Journal, Co-op/WIL is defined as an educational approach that uses relevant work-based projects that form an integrated and assessed part of an academic program of study (e.g., work placements, internships, practicum). These programs should have clear linkages with, or add to, the knowledge and skill base of the academic program. These programs can be described by a variety of names, such as cooperative and work-integrated education, work-based learning, workplace learning, professional training, industry-based learning, engaged industry learning, career and technical education, internships, experiential education, experiential learning, vocational education and training, fieldwork education, and service learning.

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