Exploring university student engagement and sense of belonging during work-integrated learning

Anna D. Rowe
Denise Jackson
*Edith Cowan University*

Follow this and additional works at: [https://ro.ecu.edu.au/ecuworkspost2013](https://ro.ecu.edu.au/ecuworkspost2013)

Part of the Higher Education Commons, Labor Relations Commons, and the Sociology Commons

10.1080/13636820.2021.1914134
This is an Accepted Manuscript of an article published by Taylor & Francis in JOURNAL OF VOCATIONAL EDUCATION & TRAINING on 23/04/2021, available online: [http://www.tandfonline.com/10.1080/13636820.2021.1914134](http://www.tandfonline.com/10.1080/13636820.2021.1914134).

[https://doi.org/10.1080/13636820.2021.1914134](https://doi.org/10.1080/13636820.2021.1914134)

This Journal Article is posted at Research Online.
Exploring university student engagement and sense of belonging during work-integrated learning

Work-integrated learning (WIL) is recognised as a valuable pedagogical strategy for developing graduate employability, increasing employment prospects and contributing to a range of other learning outcomes. The purpose of this exploratory study was to determine the degree to which WIL students in higher education, felt they fully engaged in workplace activities and experienced a sense of belonging to their workplace environment. Further aims were to identify factors that facilitated and inhibited their engagement and belonging. Data were collected using an online survey of 151 students undertaking WIL as part of a university degree, in the contexts of business, sociology and sport, in one New Zealand and two Australian universities. Students generally felt they engaged effectively in the WIL placement environment and experienced a sense of belonging by their workplace colleagues. Qualitative responses provided insights into what facilitated and enabled engagement, with confidence identified as a key facilitator and inhibitor. Belonging was associated more with relationships and the workplace environment. When preparing university students and workplace supervisors for WIL, it is important to be aware of (and address) factors, such as confidence, that facilitate engagement and belonging in order to create opportunities that fully immerse students in the workplace community.

Keywords: Belonging, confidence, student engagement, work-integrated learning, transition-to-work, employability, higher education.
Introduction

Work-integrated learning (WIL) is recognised as a valuable pedagogical strategy for developing graduate employability, fostering industry/community partnerships and promoting a range of benefits for students, workplaces and universities (Rowe and Zegwaard 2017; Smith, Ferns, and Russell 2014). WIL involves students undertaking authentic activities through engagement with industry and community partners. These activities are undertaken for-credit, are formally assessed and integrated into curriculum, unlike other forms of work-based learning which may be voluntary or undertaken outside of formal study requirements. WIL may be immersive, where students are physically based in the workplace, or could involve consultancy, project or simulated tasks in an on-campus or virtual setting.

Learning in WIL is complex, involving the interaction of personal and socio-cultural factors. While previous research has contributed to our knowledge about the importance of these factors individually on student learning (Billett 2011; Fleming and Haigh 2018) and their ability to transfer across different contexts (Jackson, Fleming, and Rowe 2019), less is known about their contribution to students’ sense of engagement and belonging during WIL. According to theories that emphasise the socio-cultural context of WIL (e.g., Billett 2006; Lave and Wenger 1991), engagement and belonging are considered important influences on learning, yet have been subject to little empirical evaluation. Better understanding their determinants will inform strategies to prepare students for WIL and enhance outcomes achieved during the experience. In this paper we use the term socio-cultural to refer to a range of social and environmental factors, such as relationships with workplace supervisors, colleagues, peers and the workplace culture/environment.

Specifically, we are interested in exploring the role of several variables, including demographics and confidence, in determining university students’ sense of engagement and
belonging during WIL. Variations in student participation in WIL have been reported for demographic characteristics, such as age (e.g., Universities Australia 2019) yet we are not aware of studies that have explored such variations for student engagement during their experience. We believed this paucity in empirical research warranted further investigation and therefore chose to examine the influence of demographics such as gender, age, discipline and level of study, as well as confidence. Confidence is important in transition, and thought to both impact on, as well as develop through, engagement and belonging in practice settings (Billett 2011, 2015). Specifically, confidence mediates student motivation and engagement in WIL (Billett 2011; Ibrahim and Jaafar 2017; Jackson 2015), and influences (among other things) how students respond to any lack of familiarity with their workplace environments and tasks (Billett 2011). While recognised as important, few studies have explicitly investigated the role of confidence during WIL, the focus to date has largely been on confidence as a benefit or outcome of WIL (Jackson 2013, 2015; Marrington, O’Shea, and Burton 2019; Reddan 2016).

In Australia and New Zealand, WIL is considered “an educational approach that uses relevant work-based experiences to allow students to integrate theory with the meaningful practice of work as an intentional component of the curriculum” (Zegwaard, Pretti and Rowe 2020a, para 2). Defining features include the involvement of multiple stakeholders (students, universities, workplaces, communities, professional associations), diverse approaches (e.g., placements, projects, virtual/online) and purposes (e.g., gaining exposure to workplace cultures and practices, networking, developing employability skills). In order to account for this complexity, particularly the contribution of personal and socio-cultural influences, there is value in drawing on multiple theoretical perspectives. As noted by Eames and Cates, “it may be impossible to separate learning from the social process in which that learning occurs”, therefore simplistic approaches to WIL research are not recommended (2011, 49). Theories informed by a socio-cultural approach are particularly valuable as they help to explain the
intersection between contributions of the student, university and workplace. In this research, we draw on the work of Bandura (1986, 1997), Lave and Wenger (1991) and Billett (2011, 2015) to explore student engagement and belonging in workplace activities during WIL. We examine factors that may influence this, and how educators and industry partners may improve WIL content and design to improve engagement and belonging.

More specifically, the study’s research objectives were to: (i) examine the extent to which university students perceived they had engaged in workplace activities during WIL; (ii) identify factors that facilitated or inhibited their engagement (participation) in the workplace and (iii) explore the extent to which students felt a sense of belonging on placement. These objectives were addressed by gathering data from students across three disciplines and institutions who recently undertook a WIL experience. The paper is structured to first provide an overview of relevant literature, followed by an outline of methodology. Results are then presented and discussed in terms of implications for relevant stakeholders.

**Background**

As educational institutions seek to enhance student employability, particularly in light of the growing use of graduate employment metrics to gauge institutional success (Jackson and Bridgstock 2018), there has been a move to embed WIL into university education. While disciplines such as Education, Health Sciences and Nursing, have traditionally interwoven periods of workplace learning into their programs, the infusion of WIL is now extending into more generalist degrees. In Australia, this growth has been catalysed by the National Strategy on WIL in University Education (Universities Australia et al. 2015) which identifies key approaches to promoting and enhancing the embedding of WIL in the sector, such as greater participation among international students and introducing innovative, scalable models of WIL which satisfy student demand and provide meaningful, authentic learning experiences.

**Student engagement in WIL**
Through engaging in WIL, students acquire knowledge and are afforded opportunities to develop professional capabilities, as well as enhance appreciation of their importance (e.g., Freudenberg, Brimble, and Cameron 2011; Jackson 2013). Billett (2015, 2019) emphasizes the role of WIL (and related educational pre- and post- interventions such as reflection and debriefing) in achieving a range of learning outcomes, such as development of conceptual, procedural and dispositional knowledge related to the procurement of occupational capacities. Placements (immersed WIL) have been found to have a stronger impact on student work-readiness and contribute more to the development of professional capabilities than other forms of WIL, such as simulated activities (Smith et al. 2014). Placement-based WIL enhances students' ability to manage their careers, improve their familiarity and understanding of the professional context and augment professional identity formation, as well as extend their professional networks and social connectedness (Bridgstock 2016; Jackson 2016).

Despite the benefits, students may experience a number of challenges to fully engaging in WIL. These include a lack of knowledge about social, institutional and local practices, insufficient procedural knowledge to perform particular practice-based tasks, the interpersonal skills to manage effective client or workplace relations, low levels of confidence, and little prior experience to draw upon in managing conflicting and confronting experiences (Billett 2011, 2015). Students also report difficulties in articulating their viewpoint/making their voice heard, receiving and positively acting upon critical feedback and developing certain aspects of self-awareness (Jackson 2014). Students’ willingness to be active agents in their own learning is crucial to the success of WIL experiences: “the more motivated, directed and intentional the students’ engagement, the more likely the learning outcomes will be richer” (Billett 2015, 212).

Sense of belonging in WIL

Belonging is a relational phenomenon whereby people feel valued by, and aligned to a group, network or organisation (Hagerty et al. 1992; Filstad, Traavik and Gorli 2019). There is
extensive theory and research relating to the crucial role belonging in higher education, particularly during the transition from school to university (Christie et al. 2009; Thomas 2012; Tinto 2010). It follows that a sense of belonging will similarly be crucial during students’ transition out of university and into the workforce (which can occur through WIL, often in the latter part of degree programs). There are thus lessons to be learned from the first-year experience literature, particularly given there has been less research on belonging and WIL, with the exception of some studies in discipline-specific areas such as nursing (e.g., Levett-Jones et al. 2009) and the emergence of recent work in the area (e.g., McBeath, Drysdale, and Bohn 2018). Available studies report that a strong sense of belonging and access to high-quality peer support in university communities are critical factors for student mental health and well-being. They strengthen student confidence in university-to-work transitions (McBeath et al., 2018), and reduce stress (Grobecker 2016). In the same way that academic staff are central to facilitating a process of belonging in first year students (Thomas 2012), workplace supervisors are seen as playing a key role in cultivating a sense of belonging, among other responsibilities (Fleming 2015; Rowe, Mackaway, and Winchester-Seeto 2012; Simosi 2012), as are workplace colleagues/peers (Fleming and Haigh 2018; Levett-Jones et al. 2009). Within longitudinal clinical placements, Roberts et al. found connectivity to be an important mediator of student learning, strongly linked to student engagement and a sense of belonging (2017, 1022).

**Confidence and WIL**

Confidence can impact on student motivation and engagement (Billett 2011, 2015; Ibrahim and Jaafar 2017; Jackson 2015) and refers to an individual’s perceptions of overall capacity (Bandura 1997). It is closely related to self-efficacy – an individual’s beliefs about their abilities concerning a specific task or set of tasks (Bandura 1997; Schramm et al. 2019). While the terms are often used interchangeably, in this paper ‘confidence’ refers to the broader
meaning (as reflected by the language used by participants in our study), however may at times encompass examples of self-efficacy which are considered to manifest confidence (Tymon, Harrison, and Batistic 2019). Given the close association between these two concepts, the literature in self-efficacy is drawn upon

Much of the previous focus on confidence in WIL has been on benefits, in terms of how WIL improves student self-reported confidence and self-efficacy (Arsenis and Flores 2020; Jackson 2013, 2017; Reddan, 2016), as well as perceptions of employability and job performance competencies (Jackson and Wilton 2017; Arenis and Flores 2020). Jackson’s (2016) study of business undergraduates undertaking workplace-based WIL, for example, noted five ways the WIL experience augmented student confidence in their transition to the workplace due to enhancing what she terms as ‘pre-professional identity’. These were, gaining insight into the professional environment, establishing professional networks, enhancing technical knowledge, receiving constructive feedback from established professionals, and developing non-technical skills to aid communication and collaboration with co-workers. This heightened confidence among WIL students better prepares them as graduates who can adapt quickly and confidently to new challenges and tasks in increasingly complex and diverse contemporary work environments (Cascio 2019).

Confidence, however, is also something that students bring into WIL, and mediates their engagement in practice settings (Billett 2011; Jackson 2015). Confidence before WIL has received less attention in research to date, than confidence as a product of WIL. Students’ confidence prior to commencing WIL can be augmented by rigorous preparation (Billett 2011, 2015) and purposively bolstered during the WIL experience through quality supervision and feedback, and opportunities to repeat tasks (Cummings and Connelly 2016; Ibrahim and Jaafar 2017). This is because confidence is strongly linked to capability (Meehan and Howells 2018).
Mastery experiences are thought to underpin confidence and self-efficacy because they provide evidence that students can succeed at a task (Druckman and Bjork 1994; van Dinther, Dochy, and Segers 2011).

Previous research has reported positive correlations between a sense of belonging and confidence in the transition to university (e.g., Strayhorn et al. 2015), and links between belonging and confidence have similarly been reported in WIL. In clinical nursing placements a sense of belonging has been found to impact positively on student confidence (Grobecker 2016; Levett-Jones et al. 2009) with confidence and belonging identified as key elements of professional identity development (Walker et al. 2014). Beyond nursing, studies on confidence and belonging in WIL are limited, although students who undertake WIL appear to have a stronger sense of belonging and access to high-quality peer support, which thus makes them more confident in university-to-work transitions (McBeath et al. 2018).

**Theoretical underpinnings**

Several theories underpin the premise of learning through workplace engagement. Because of the complex interplay of factors underpinning learning in WIL, and that learning is simultaneously about belonging to the workplace discourse as well as synthesising one’s own identity within the community (Garraway 2011), it is important to draw on theories that represent and account for personal and socio-cultural (e.g., relational, curricula, workplace) factors. This research is thus informed by three theoretical orientations that emphasise the socio-cultural context of WIL.

Firstly, Bandura’s (1977) social learning theory, and later social cognitive theory (Bandura 1986, 1977), proposes that knowledge is gained by observing the behaviours of others, interactions, and experiences. He considered self-efficacy (situationally specific
confidence)\(^1\) as playing a particularly crucial role in “the self-regulation of motivation through goal challenges and outcome expectations” (2001, 10). Thus, self-efficacy (confidence) mediates the extent to which a person will engage with activities and tasks.

In WIL students learn through observing the behaviours and consequences (successes and failures) of colleagues in the workplace (Eames and Cates 2011; Fleming and Haigh 2018). Their motivation to engage in particular activities or tasks is influenced by how effectively they think they can perform tasks. Social-cognitive theory therefore contributes to our understanding of why students engage (or not) during their workplace-based WIL experience.

Secondly, Lave and Wenger’s (1991) communities of practice theory is relevant because of its focus on belonging, which is central to understanding WIL (Filstad et al. 2019). Lave and Wenger propose that learning occurs through community interactions. Their notion of legitimate peripheral participation denotes that learning can only be understood within the social context in which it occurs. Central to this premise is the idea of belonging, with meaningful participation in communities “negotiated between the individual’s desires and intentions (including the desire to belong) and the community’s changing requirements for certain forms of participation” (Fenwick 2000, 253). While our research does not focus on the characteristics of context, that is, the structure, design and habits of communities (a central focus of this theory), Lave and Wenger’s work nevertheless highlights the importance of belonging, and that feeling unsupported and disconnected from learning communities can lead to feelings of isolation and low confidence (Delahunty, Verenikina, and Jones 2014; Filstad 2014; Taylor 2014).

---

\(^1\) While Bandura (1986) distinguished between confidence and self-efficacy - the former referring to overall perceptions of capability, and the latter to perceived capability in relation to specific tasks - our use of the term (self-) confidence is broader in scope, and inclusive of both concepts. Druckman and Bjork (1994) follow a similar approach because the term confidence is more familiar to laypeople (including the participants in our research).
Finally, Billett’s work (2011, 2015, 2019) provides a useful conceptual framework for understanding workplace engagement (to a lesser extent belonging). Billett (2006) distinguishes between the personal (i.e., student agency) and social-cultural (i.e. contextual) aspects of workplace learning, proposing it is a duality. On the one hand student engagement is determined by the affordances that workplaces offer (i.e., the degree by which they invite students to engage and participate), and on the other hand, by how students decide to engage with what they are afforded. There is thus an interdependence between these personal and social-cultural variables.

Critical to optimising WIL is preparing students before engaging WIL, supporting them during their experience and enriching learning through post-WIL interventions (Billett 2015, 2019). Supporting development of students’ confidence before they undertake their WIL activity is particularly important, given it mediates outcomes in practice settings and their ability and willingness to perform specific roles in the workplace (Billett 2011). For Billett (2015), issues of “confidence and productivity” are particularly important when students need to transition and/or perform effectively on the job quickly. This leads to our research which focuses on the extent to which university students felt they fully engaged in a WIL placement, and their sense of belonging during the experience.

Method
This exploratory study focuses on WIL experiences where students are physically located within a workplace. The term placement will be used to refer to all forms of immersed WIL, including internships and practicums.

Participants
One hundred and fifty-one undergraduate and postgraduate students who had completed WIL as part of their studies participated in the study. A cross-disciplinary sample, sought across the three different institutions, from Business, Sociology and Sports/Recreation, were selected.
based on the convenience for researchers’ to recruit students. Two universities were located in Australia (Perth, Sydney) and one in New Zealand (Auckland). Survey timing and a change in staffing resulted in a relatively lower number of respondents from the university based in Sydney. Participants had completed a minimum of 100 hours of workplace-based WIL (typically unpaid) within the previous six months and were at least halfway through their degree. Each universities’ WIL program required students to engage in an induction to prepare for WIL, meet during the WIL experience, and participate in reflection and/or debriefing with their academic coordinator and class peers in virtual or face-to-face settings. Key learning outcomes focused on the application of discipline knowledge and professional skills in a practical setting, with associated assessments that included reflective activities and report writing. The student sample’s characteristics are presented in Table 1.

[Insert Table 1]

**Procedures**

The student surveys were administered between November 2017 and June 2018, to two different cohorts within each of the institutions and approximately six months apart. Eligible students were invited to participate in the anonymous, online survey via an electronic link on the university’s learning management system or by email. Ethics approval was obtained from each university.

**Measures**

The survey employed two closed questions, using five-point Likert scales, and four open-response questions. Given the lack of empirical exploration in this area, questions were designed by the research team and piloted for content validity. To explore their engagement in the workplace, students were asked ‘to what extent did you fully participate in your WIL placement environment (i.e. speaking up in meetings, making suggestions/recommendations, asking questions of other staff)’. They were then asked to comment, separately, on what
inhibited and facilitated their ability to engage fully in the WIL placement environment’. They were also asked to ‘what other things might help enable you to participate fully in the WIL placement environment’. Regarding their sense of belonging, students were asked ‘to what extent did you feel you belonged or were accepted by your workplace colleagues’, followed by an invitation to comment on why they thought this was.

**Analysis**

Closed survey questions were analysed using descriptive techniques, as well as One-Way Analysis of Variance (ANOVA) to detect any differences by background and study characteristics (age, gender, study level, discipline, hours in WIL). A Bonferroni correction was not applied, given the exploratory nature of the study (see Feise 2002). The students’ open responses were coded inductively at an individual response level by a member of the research team, developing a coding scheme and framework of themes. The coding analysis was cross-checked by another team member, revisiting individual responses for any arising differences. Consensus was reached on any differences in identified codes and a framework of themes was developed. Frequency counts were determined to represent the number of student responses for each of the key themes. An audit trail during the analysis was retained and trustworthiness and rigour enhanced through multiple analyses and gathering data over two time periods (Merriam 1995). The analysis was conducted using SPSS version 24.0 and Microsoft Excel.

**Findings and discussion**

**Student engagement during WIL**

Figure 1 presents the student ratings for the extent to which they felt they fully engaged in the workplace environment during their WIL experience. The mean rating was 4.08 (SD=.83), affirming that most of the students, in fact approximately 80%, felt they engaged fully either frequently or all the time. ANOVA (α=.05) indicated there were no significant variations
reported for age, gender, study level, discipline, and the number of hours completed in the workplace. [Insert Figure 1]

**Facilitators and inhibitors to engagement**

Analysis of student qualitative responses from the survey reveal key perceived facilitators and inhibitors to engagement (Table 2). These can be classified broadly into personal (e.g. attitude, confidence) and socio-cultural (e.g. supervision, peers, opportunities, time, workplace environment) factors.

[Insert Table 2]

Confidence was the most frequently reported facilitator and inhibitor of engagement by students, supporting previous research that confidence mediates student motivation and engagement in practice settings (Billett, 2011; Ibrahim and Jaafar 2017; Jackson 2015). Interestingly, when reported by students as a facilitator, confidence was closely associated with student agency and/or encouragement and support provided by workplace supervisors/peers, e.g., students commented their ability to participate fully was influenced by: ‘my own confidence and encouragement/support from my supervisors’; ‘own confidence and asking questions. Using my own initiative to go further with tasks when supervisor in meetings for long periods at a time’; ‘my own confidence and drive to learn, which was support by my workplace’. When mentioned as an inhibitor, however, confidence related either to the student’s confidence (or lack of) or limits placed on students’ confidence by the supervisor or workplace environment, e.g. ‘I felt confident and I had the ability to apply more but supervisor only wanted to provide a limited amount of tasks’; ‘Confidence and not being really considered much since I’m a student. I felt a bit of underestimation’. Confidence as an inhibitor therefore appeared to be more strongly related to workplace factors (at least in the minds of students), while confidence as a facilitator is seen as more connected to student agency as well as workplace factors (particularly the role of supervisors and peers).
This finding supports Billett’s (2011) assertion that it is the interaction between student contributions (including their agency) and the settings in which they engage (including the influence of supervisors and colleagues) that is key to understanding learning in WIL. Student agency, along with prior knowledge and capacities, impact on engagement and are thus ‘central to the quality of their participation and learning’ (2011, 23). According to Billett, students experience uncertainty when practice settings/tasks are unfamiliar, with confidence undermined by unclear expectations and discrepancies between the requirements of workplaces and universities. He adds, ‘how students reconcile these differences is likely to depend in part upon their confidence, but also in part upon what they know about how to deal with such a situation (24). With mastery experiences the most effective way of improving confidence and self-efficacy (Druckman and Bjork 1994; van Dinther et al. 2011), this emphasises the importance of providing students with ample opportunities to practice ‘authentic’ tasks prior to engaging in WIL, supported by goal setting, reflection and other pedagogic strategies (Billett 2011, 2015).

Other key facilitators included students’ dispositions and attitudes, e.g., ‘my stubbornness’, ‘my own desire to do well’. Encouragement and support from supervisors and the workplace environment were also important, e.g., ‘encouragement and feedback from supervisor and mentors. They were friendly and always helped me to learn something new. They also trusted me and let me try various tasks’; ‘the valuable knowledge level I have from my past studies. The BES units beforehand helped me with my public speaking and the essentials of office etiquette’; and ‘gradually being given more responsibility on workplace tasks’. Key inhibitors similarly included the workplace environment, but also opportunities and time: ‘supervisors not present and very busy, as well as main marketing decisions being made by an external agency’; ‘being in an office on my own away from other staff’; ‘not enough opportunities - not enough reporting to contribute for team meetings’; and ‘everyone having
their own projects with short time constraints and my placement being stretched across a whole semester’. These point to social/cultural aspects of the workplace, as well as design features of the placement (Billett 2011, 2015, 2019).

When asked what strategies could help students fully engage in the workplace environment, the following were reported (frequency counts are reported in brackets, that is, the number of students who reported each theme): environment (6), confidence (5), time (5), support (5), opportunities (3), interactions with colleagues (2), induction (2), more time in workplace (3), peer support (3), flexible WIL/flexible time (2), organisational culture (2) and responsibility (2). Most of these relate to the workplace environment and the social element of work placements. Again, confidence appears as an important theme, e.g. ‘self-confidence, more time in the workplace without other demands such as other uni work, work and volunteer work. More interaction between external staff’. These findings suggest the socio-cultural context is important, however are based on modest numbers so care needs to be taken when interpreting results.

**Students’ sense of belonging**

Figure 2 presents the ratings for the extent to which students believed they belonged or were accepted by their workplace colleagues during WIL. The mean rating was 4.10 (SD=.94) which indicates a strong feeling of acceptance among students. Approximately 70% of the students rated themselves as belonging or being accepted by their workplace colleagues either frequently or all the time. ANOVA (α=.05) reported a significant variation only for gender, $F = (1,80) = 5.044, p = .027$, with females reporting a significantly higher rating (4.27) than males (3.81). To our knowledge there are no specific studies on gender and belonging in WIL, with the exception of McBeath (2015) who found no significant differences. Much first year transition literature similarly reports few major differences between male and females sense of belonging (e.g., Ribera et al. 2017). However, gender has been found to be a significant predictor
of students’ adjustment to university (e.g., Conley et al. 2014) although overall findings are mixed (Sanagavarapu et al. 2019). Further research is likely needed in this area.

[Insert Figure 2]

Qualitative data from the student survey point to the specific factors underpinning such feelings of belonging and acceptance (see Tables 3 and 4). Again, social and environmental factors were predominate, reinforcing the socio-cultural context of WIL (e.g., Billett 2011, 2015, 2019) and the importance of workplace supervisors and colleagues in fostering belonging (van Gijn-Grosvenor and Huisman 2020). Once more, responses were small so care needs to be taken when interpreting. Confidence was not as prevalent in accounts of belonging, only mentioned by two students, e.g. ‘I get along great with all my colleagues. I’m friendly, outgoing, enthusiastic and confident and love people….so it is easy for me to feel belonging’. However, other personality/attitudinal factors were identified as having an impact, e.g. extroversion, anxiety.

[Insert Table 3]
[Insert Table 4]

It is perhaps not surprising that confidence was not as prevalent in accounts of belonging, as belonging is a relational phenomenon (Hagerty et al. 1992; Filstad et al. 2019). Key factors associated with a high level of belonging reflected this, e.g. the workplace environment, relationship building, and a welcoming workplace. Factors associated with a lower sense of belonging included feeling undervalued, the workplace environment/staff attitude, lack of opportunities for interaction and insufficient time in the workplace. Our findings support those of other studies which also emphasise the importance of workplace supervisors (Fleming 2015; Rowe et al. 2012; Simosi 2012), colleagues/peers (Fleming and Haigh 2018; Levett-Jones et al. 2009; McBeath et al. 2018) and relationship building (Roberts
et al. 2017) in fostering support and a sense of belonging. While most of the emphasis was on socio-cultural factors, personal factors such as confidence were mentioned (as part of student’s attitude) supporting existing literature which has reported links between confidence and belonging (e.g., Grobecker 2016). However, it appears that workplace supervisors and peers are more important in facilitating or inhibiting the development of a sense of belonging, at least in the eyes of students.

**Implications for theory, practice and future research**

**Theoretical implications:** There is a need to draw on multiple theoretical approaches to account for the complex interplay of personal and social-cultural factors in WIL (Eames and Cates 2011; Garraway et al. 2011). Our research highlights the importance of engagement, belonging and confidence, but raises further questions on how they are related. For example, while our data suggests a strong relationship between confidence and engagement, the relationship between confidence and belonging is less clear. The literature suggests that when students feel secure and valued in WIL, it validates their sense of worth, helping them realise their capabilities, and thus develops confidence (Levett-Jones et al. 2009). When this doesn’t occur, students can feel alienated, stressed and anxious (Grobecker 2016; Levett-Jones et al. 2009). Other studies suggest student confidence increases belonging (Strayhorn et al. 2015; Thomas 2012) and experiences of belongingness in the workplace subsequently impact on students’ level of engagement (Chan 2016). In our study, confidence was a less salient factor than the workplace environment, and relationships with managers and colleagues, in facilitating belongingness, and we did not explicitly explore whether a sense of belonging underpinned confidence or engagement. A better understanding of the directional nature of the relationships between these variables, including their impact on student learning, is needed to improve student outcomes in WIL.
Examining relationships between these constructs further builds on the work of Billett (2011, 2015, 2019) and Bandura (1986, 1997) and may provide additional insight on how and why students engage differently in WIL accounting for personal and socio-cultural factors, in particular student agency (e.g., Billett 2015; Bandura 2001). However, neither theory explicitly accounts for belonging, hence other conceptual models (e.g., Lave and Wenger 1991) are needed to explain this dimension. Despite the recognition that positive and supportive relationships are critical to effective WIL experiences, underpinning a sense of belonging, there is a lack of theoretical development in this area and more integrated models are needed. This is an area recommended for future research and development.

**Practical implications:** Findings from our exploratory study, support other literature in highlighting the importance of personal and socio-cultural factors for student engagement and belonging in WIL, and for developing ways to manipulate both to enhance student learning and outcomes. A useful approach is to classify what strategies related to students (personal), workplace supervisors/colleagues (social) and workplaces/universities (environment), can be adopted to promote engagement and belonging.

First, it appears critical for students to adopt an agentic role in their learning as this was closely associated with confidence, leading to higher levels of engagement and a greater sense of belonging (Billett 2011, 2015; Trede and Jackson 2019). Also important is that students focus on developing confidence during their studies, and prior to WIL to gain full benefit from the experience. Trede and Jackson identify a range of actions students can do to take responsibility for their professional journey, including getting more involved, being resourceful and well-prepared, asking questions, sharing ideas, consulting with others, maintaining a positive attitude and being open-minded.
Second, it is important to consider what workplace supervisors and colleagues can do to improve student engagement and belonging once they are in the workplace, particularly among males. The findings of our study reflect other literature which emphasises the importance of supervisors and workplace colleagues in promoting a welcoming, friendly and supportive workplace environment, and being responsive to students or new staff, which can in turn, enhance their confidence, sense of belonging and promote self-directed learning (e.g., Fleming and Haigh 2018; Levett-Jones et al. 2009; Simosi 2012). Students will feel more empowered to ask questions, share their ideas and maximise learning opportunities, when they feel they are valued and have a strong sense of belonging to the workplace.

Finally, attention is needed on how academics can design WIL to ensure the classroom (pre- and post-WIL learning) and workplace will foster engagement and belonging. Any strategies require careful consultation with partner organisations, whose collaborative role in designing and delivering WIL is critical (Ruskin and Bilous 2020). Providing sufficient opportunities and time for students to attain learning outcomes intended by the workplace experience, and ensuring the experience is supported by appropriate pedagogic practices before, during and after those experiences are factors of curriculum design academics can influence (Billett 2011, 2015).

With confidence a key facilitator and inhibitor of engagement, this raises the question as to what level of confidence is required to enable students to effectively engage in WIL? And how can we develop confidence prior to WIL to enable students to effectively engage? We know from previous research that confidence is a situationally specific concept, and can be developed (Tymon et al. 2019, see also Arsenis and Flores 2020). Van Dinther et al. (2011) report that educational interventions to improve self-efficacy have an 80% influence on self-efficacy, with those based on social cognitive theory most effective – this has implications for
the design of such interventions. Billett offers strategies for universities to prepare students for WIL, building confidence, agency and thus the potential for engagement. For example, accounting for students’ readiness (e.g., interest, capacities, confidence) when enacting particular kinds of experiences, gradually staging enactment of experiences in practice settings and sharing of experiences through debriefing and other group processes are examples of interventions which can build student confidence before they engage in WIL (Billett 2011). Following on, is the need for further research and development to understand the impact that increased confidence has on students learning outcomes, performance, and transition to work/employment more broadly.

**Conclusions**

This exploratory study provides a unique insight into university student perceptions of their engagement and belonging during WIL. Most students reported they fully engaged in their WIL placement and experienced a strong sense of belonging. Demographic characteristics were not found to account for differences in engagement, and only gender for differences in students’ sense of belonging. Findings suggest the complex interplay of personal and socio-cultural factors can influence both engagement and belonging among students during WIL. Confidence was identified as a key facilitator and inhibitor of engagement, and to a lesser extent for belonging which appears to be more impacted by socio-cultural factors. Findings can inform the development of effective strategies for students, educators and workplaces which have the potential to enhance engagement and belonging, thus improving the quality of students’ experiences and learning in WIL. This is critical given feelings of belonging can reduce stress experienced during WIL (Grobecker 2016) and thus enhance engagement.

The study contributes to our understanding of learning during WIL, and how it can be designed to improve student outcomes. However, our data are limited to a small number of disciplines, and therefore not necessarily representative of students undertaking WIL across all
possible contexts (disciplines, institutions, countries). The study does, however, provide insights for non-accredited disciplines where WIL is typically elective and less guidance is provided on quality provision. Larger studies are needed to confirm findings reported here across diverse settings. Specifically, more in-depth investigations to unpack the interplay between personal and socio-cultural factors as facilitators/inhibitors of engagement and belonging in WIL, and development of theory to support this. Further, our data and much of the theoretical frameworks upon which this research are based, are informed by placement WIL. There are many other models of WIL, where students’ engagement and belonging may play out differently and investigating engagement and belonging in these contexts would be highly beneficial. This is particularly pertinent given the recent shift towards more remote (online) and virtual forms of WIL in response to the Covid-19 pandemic (Zegwaard, Pretti and Rowe 2020b).

Acknowledgements: We would like to acknowledge the course convenors who kindly provided access to their student cohorts for data collection.

The authors declare that they have no conflict of interest.

References


Bridgstock, R. 2016. *Graduate Employability 2.0: Enhancing the Connectedness of Learners, Teachers and Higher Education Institutions.* Canberra: Department of Education.


Table 1. Sample demographics – student survey (N=151)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Subgroup</th>
<th>Valid %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Less than 21 years</td>
<td>17.9</td>
</tr>
<tr>
<td></td>
<td>22 to 29 years</td>
<td>57.5</td>
</tr>
<tr>
<td></td>
<td>30 to 39 years</td>
<td>16.4</td>
</tr>
<tr>
<td></td>
<td>40 years and above</td>
<td>8.2</td>
</tr>
<tr>
<td>Gender</td>
<td>Male</td>
<td>34.3</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>65.7</td>
</tr>
<tr>
<td>Residency</td>
<td>Domestic</td>
<td>66.4</td>
</tr>
<tr>
<td></td>
<td>International</td>
<td>33.6</td>
</tr>
<tr>
<td>Level of study</td>
<td>Undergraduate</td>
<td>73.9</td>
</tr>
<tr>
<td></td>
<td>Postgraduate</td>
<td>26.1</td>
</tr>
<tr>
<td>Discipline</td>
<td>Business</td>
<td>82.4</td>
</tr>
<tr>
<td></td>
<td>Sport and Recreation</td>
<td>13.0</td>
</tr>
<tr>
<td></td>
<td>Sociology</td>
<td>4.6</td>
</tr>
<tr>
<td>Hours on placement</td>
<td>100 to 150</td>
<td>56.0</td>
</tr>
<tr>
<td></td>
<td>150 to 299</td>
<td>11.2</td>
</tr>
<tr>
<td></td>
<td>More than 300</td>
<td>32.8</td>
</tr>
<tr>
<td>Institution One (WA-based)</td>
<td>97</td>
<td>64.2</td>
</tr>
<tr>
<td>Institution Two (NZ-based)</td>
<td>47</td>
<td>31.2</td>
</tr>
<tr>
<td>Institution Three (NSW)</td>
<td>7</td>
<td>4.6</td>
</tr>
</tbody>
</table>
Table 2. Students’ perception of facilitators and inhibitors of engagement in WIL placements

<table>
<thead>
<tr>
<th>Theme</th>
<th>Frequency (counts)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Facilitators</strong></td>
<td></td>
</tr>
<tr>
<td>Student confidence</td>
<td>37</td>
</tr>
<tr>
<td>Student attitude</td>
<td>29</td>
</tr>
<tr>
<td>Encouragement</td>
<td>28</td>
</tr>
<tr>
<td>Supervisors/ supervisor support</td>
<td>17</td>
</tr>
<tr>
<td>Workplace environment</td>
<td>10</td>
</tr>
<tr>
<td>Support</td>
<td>8</td>
</tr>
<tr>
<td>Peers</td>
<td>6</td>
</tr>
<tr>
<td>Workplace colleagues</td>
<td>2</td>
</tr>
<tr>
<td><strong>Inhibitors</strong></td>
<td></td>
</tr>
<tr>
<td>Student confidence</td>
<td>10</td>
</tr>
<tr>
<td>Workplace environment</td>
<td>9</td>
</tr>
<tr>
<td>Opportunities</td>
<td>8</td>
</tr>
<tr>
<td>Insufficient time</td>
<td>6</td>
</tr>
<tr>
<td>Supervisor</td>
<td>4</td>
</tr>
<tr>
<td>Lack of knowledge or experience</td>
<td>4</td>
</tr>
<tr>
<td>Staff attitude</td>
<td>2</td>
</tr>
</tbody>
</table>

*Frequency counts refer to the number of students who reported particular themes.*
Table 3. Student perception of the factors underpinning a sense of belonging by workplace colleagues

<table>
<thead>
<tr>
<th>Theme</th>
<th>Frequency (counts)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>High belonging</strong></td>
<td></td>
</tr>
<tr>
<td>Workplace environment</td>
<td>8</td>
</tr>
<tr>
<td>Relationship building</td>
<td>8</td>
</tr>
<tr>
<td>Welcoming</td>
<td>7</td>
</tr>
<tr>
<td>Student personality/attitude (including confidence)</td>
<td>6</td>
</tr>
<tr>
<td>Inclusion</td>
<td>5</td>
</tr>
<tr>
<td>Friendly</td>
<td>5</td>
</tr>
<tr>
<td>Social interaction</td>
<td>4</td>
</tr>
<tr>
<td>Encouragement</td>
<td>3</td>
</tr>
<tr>
<td>Organisational culture</td>
<td>3</td>
</tr>
<tr>
<td>Team dynamics</td>
<td>3</td>
</tr>
<tr>
<td><strong>Low belonging</strong></td>
<td></td>
</tr>
<tr>
<td>Feeling undervalued</td>
<td>3</td>
</tr>
<tr>
<td>Workplace environment/ staff attitude</td>
<td>3</td>
</tr>
<tr>
<td>Lack of interaction</td>
<td>2</td>
</tr>
<tr>
<td>Insufficient time in workplace</td>
<td>2</td>
</tr>
<tr>
<td>Located outside of workplace</td>
<td>1</td>
</tr>
<tr>
<td>Lacked experience</td>
<td>1</td>
</tr>
<tr>
<td>Lack of support</td>
<td>1</td>
</tr>
<tr>
<td>Student personality/attitude</td>
<td>1</td>
</tr>
</tbody>
</table>

\(^{a}\) Frequency counts refer to the number of students who reported particular themes.
### Table 4. Selected examples of students’ perceived sense of belonging

<table>
<thead>
<tr>
<th>Factors</th>
<th>High Belonging</th>
<th>Low Belonging</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social-cultural</td>
<td>‘they were friendly from day 1 and never made me feel like an inconvenience. They were happy to answer any questions I had’</td>
<td>‘most of my colleagues were very busy and so I didn’t really get to build up personal connections’</td>
</tr>
<tr>
<td></td>
<td>‘the relaxed and inclusive environment - not the end of the world if something were to go wrong’</td>
<td>‘I was there for a short while so felt alienated at times’</td>
</tr>
<tr>
<td>Personal</td>
<td>‘I get along great with all my colleagues. I’m friendly, outgoing, enthusiastic and confident and love people. I love to make human connections so it is easy for me to feel belonging’</td>
<td>‘I have anxiety and might feel like I am not accepted even when I am’</td>
</tr>
</tbody>
</table>