

Understanding barriers to engagement in an unpaid field placement: Applying the transtheoretical stages of behavior change model

ASHLEY STIRLING¹

AALAYA MILNE

ANIKA TAYLOR

AINSLEY GOLDMAN

University of Toronto, Toronto, Canada

National and international calls for increased work-integrated learning (WIL) offerings have increased in the last decade. Although previous research on WIL engagement has explored population-specific barriers experienced during participation, a gap exists on barriers experienced by students across the participation spectrum, including those who choose not to participate. This study sought to investigate students' perspectives of the barriers to engaging in an optional unpaid field placement. Grounded in the transtheoretical stages of behavior change model, a mixed-methods convergent parallel design was used. Data from 110 surveys and 17 semi-structured interviews with students were analyzed using descriptive statistics and thematic analysis. Results are presented in relation to stages of behavioral change, barriers to engagement, and moderating factors, including perceived value of WIL and self-efficacy. Findings from this study support the need for future research to explore promotional and intervention strategies aligned with stages of behavior change to increase students' decisions to engage in WIL participation.

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As a pedagogical practice that enables learning through deliberately integrated experiences in both educational and workplace settings (Billett, 2009), work-integrated learning (WIL) has been recognized as beneficial for students' growth, development, and preparation for their future careers (Smith et al., 2014). Educational theories citing the benefits of this type of social and situation specific learning, namely the zone of proximal development (Kantar et al., 2020), situativity theory (Dunning & Artino, 2011), and Kolb's (1984) theory of experiential learning, have been crucial to the implementation of WIL offerings and curriculum in higher education. In line with this, over the last decade, calls for increased WIL offerings both nationally, in Canada (Business Higher Education Roundtable (BHER), 2016) and internationally, in the United Kingdom (Wilson, 2012), Australia (Universities Australia et. al., 2015) and New Zealand (Cooper et al., 2010), have led to significant attention on students' experiences of WIL (BHER, 2016; Patrick et al., 2008; Wilson, 2012). As this area of research continues to grow, with a particular emphasis on facilitators of a positive WIL experience, it is important to note that not all students can access and engage in quality WIL, and given the choice, some students choose not to partake in work-integrated learning at all (Universities Australia et. al., 2015).

Institutional barriers previously identified as preventing students from engaging in quality learning outside of the traditional classroom setting include, but are not limited to, a lack of administrative support and connection to workplaces (Jackson et al., 2017; Lawlis et al., 2014) and highly structured timetables (Lawlis et al., 2014). Reports of employers' inconsistent understandings of WIL (Jackson et al., 2017; Martin & Leberman, 2005) and discrepancies between student and mentor expectations (Brooks & Youngson, 2016) have also been noted as a challenge associated with WIL participation, which may also influence a student's decision to not partake in these programs. In addition to

¹ Corresponding author: Ashley Stirling, ashley.stirling@utoronto.ca

limitations at the institutional level, a number of individual level barriers may prevent students from accessing and engaging in quality WIL, such as student awareness, perceptions, and sense of preparedness for the program, and other challenges related to finances, time commitments, equity and access (Higher Education Quality Council of Ontario (HEQCO), 2018).

The existence of additional barriers preventing students from engaging in WIL is supported by researchers' consistent assertions that various student groups are underrepresented in these spaces, including international students (Tran & Soejatminah, 2017; Wall et al., 2017), first generation students whose parent(s) did not earn a bachelor's degree (four year program) in a higher education setting (university/college) (Katrech & Aruguete, 2017), students with a racial identity that has been socially constructed and hierarchically situated as unequal compared to the White majority (Hubain et al., 2016), Indigenous students (Gair et al., 2015), students with low grade point averages (GPA) (Dunn et al., 2016), students from low socioeconomic backgrounds, and students with disabilities (Cooper et al., 2010). The scholarship underlying this finding suggests that barriers facing these underrepresented groups, such as concern for harassment and discrimination, are omnipresent and characteristic of the Western, Eurocentric and ableist frame within which society and higher education systems, structures and learning pedagogies, such as WIL, were developed (Kraglund-Gauthier et al., 2014; Michalski et al., 2017; Shankar et al., 2013). As such, in line with the aforementioned barriers, and given the increasing diversity of student populations across sexual orientation, gender identity, race, ethnicity, immigration and ability status (Kirby, 2009; Kraglund-Gauthier et al., 2014; Michalski et al., 2017), calls for the provision of WIL for all students inevitably necessitates heightened attention to issues of equity, access and accessibility (Jones, 2014).

With most research in this area to date, reporting on general (HEQCO, 2018; Jackson et al., 2017; Lawlis et al., 2014; Martin & Leberman, 2005) and population-specific barriers (Cooper et al., 2010; Gair et al., 2015; Hubain et al., 2016; Katrech & Aruguete, 2017; Tran & Soejatminah, 2017; Wall et al., 2017) to quality WIL engagement and learning as outlined above, a gap exists in our understanding of factors that prevent students from enrolling in these programs to begin with. Therefore, the purpose of this study was to investigate the perspectives of students who participate in WIL, as well as those who choose not to participate, on the barriers to access and engagement in an optional unpaid field placement.

Placement Program

The field placement program in the Faculty of Kinesiology and Physical Education at the University of Toronto offers a credit bearing offering that includes unpaid student participation in 120 hours of hands-on practice, where students are paired one-to-one with a mentor to observe and assist as appropriate in the day-to-day activities of the workplace. The field placement experience is spread over the academic year (September – March) and is open to students in their third, fourth and fifth year of the program. Placements can occur in a range of workplace settings including education, health care, sport and recreation, health promotion, and research and innovation. As an optional elective offering available for upper year undergraduate students, approximately 220 enroll out of an eligible 500 students (~44%) each year. In order to partake in the field placement, students are required to follow a pre-placement application process beginning in May, including interviewing with potential mentors and securing a placement position ahead of the Fall semester.

By exploring the perspectives of both students who participated, as well as students who chose not to participate in WIL, this study endeavours to understand the barriers experienced by students across

the participation spectrum (i.e., considering those who choose not to engage in a placement). The researchers posit that understanding barriers is an important step in informing strategies to increase the number of students choosing to participate in WIL, the novel direction on which will be best supported by the use of the transtheoretical stages of behaviour change model (Prochaska & DiClemente, 1982).

Theoretical Grounding

Given its alignment with the present inquiry, the transtheoretical stages of behavior change model (Prochaska & DiClemente, 1982) was selected to guide the following study and its intention to understand how to further augment the number of students choosing to participate in an elective unpaid field placement program. The transtheoretical model (TTM), also known as the stages of change model, specifies that behavior change is a process in which individuals progress through a series of five stages, including: i) Pre-contemplation - individuals have no intention of engaging in the field placement; ii) Contemplation - individuals have an intention to engage in the field placement; iii) Preparation - individuals prepare a plan of action to engage in the field placement; iv) Action – steps are taken and progress is made to ensure engagement in the field placement; and v) Maintenance - individuals maintain actions that support engagement in the field placement (Prochaska & DiClemente, 1982). Employment of this theory will serve to further contextualize findings on barriers to access and engagement in WIL in relation to the behavioral stages of students who have chosen not to complete an optional unpaid field placement.

A key consideration in exploring behavior change is decisional balance, which refers to the process of weighing the advantages against the disadvantages of adopting a specific behavior change (Marcus et al., 1994), such as deciding to participate in WIL. As the advantages increase and the disadvantages decrease, it is more likely that an individual will progress through the stages of behavior change. Therefore, to increase the number of students choosing to engage in WIL, an understanding of both the barriers and the factors influencing students' decisions to engage in WIL is needed. As such, factors that moderate this decisional balance, specifically the perceived value of WIL and students' sense of self-efficacy, were explored.

METHODS

A convergent parallel design was used in the study (Creswell & Plano Clark, 2011). This approach is consistent with Zegwaard and Hoskyn's (2015) assertion that more research in the area of WIL is moving towards a mixed methods approach, as combining the strengths of both quantitative and qualitative research may help to better understand the complexity of educational issues. Following research ethics board (REB) approval, quantitative data were attained from an online anonymous survey (Phase 1) and qualitative data from semi-structured interviews (Phase 2) were collected concurrently. Following the completion of data collection for both phases of the research, findings were analyzed independently and then analyzed together. During the latter, themes and relationships were identified, allowing for an overall interpretation of the collected data.

Phase 1: Student Survey

Participants

Survey participants included 110 kinesiology students, who had (n = 67) and had not (n = 43) completed the field placement. Demographic data was collected through self-identification, and participants were able to select more than one option from each demographic category. They were also given the option

to not disclose. Student participants who had completed the field placement included individuals who self-identified as cisgender, referring to a person whose gender aligns with their gender/sex assigned at birth (female, $n = 53$; 79.1%; male, $n = 14$, 20.9%), LGBTQ2SIA+ (lesbian, $n = 1$; 1.5%; bisexual, $n = 2$; 3.0%; queer, $n = 1$; 1.5%), a person with a disability (non-visible disability, $n = 5$; 7.5%; visible disability, $n = 1$; 1.5%), Black, Indigenous and/or a person of color (BIPOC) ($n = 13$; 19.4%; including, Black, $n = 3$; 4.5%; Latin/Hispanic, $n = 2$; 3%; Middle Eastern, $n = 4$; 4.5%; mixed race; $n = 4$; 6%), an international student ($n = 2$; 3%), and first generation Canadian ($n = 29$; 43.3%). Among the students who had not completed the field placement, individuals from a variety of groups were represented, including those who self-identified as cisgender (female, $n = 30$; 69.8%; male, $n = 11$; 25.6%), LGBTQ2SIA+ (gay, $n = 1$; 2.3%; bisexual, $n = 4$; 9.3%; transgender, $n = 1$; 2.3%; queer, $n = 3$, 7.0%; another gender identity, $n = 2$; 4.7%), as a person with a non-visible disability ($n = 2$; 4.7%), BIPOC ($n = 14$; 32.6%; including, Black, $n = 1$; 2.3%; Indigenous, $n = 1$; 2.3%; Latin/Hispanic, $n = 1$; 2.3%; Middle Eastern, $n = 5$; 11.6%; mixed race; $n = 4$; 9.3%; other BIPOC identity, $n = 2$; 4.7%), an international student ($n = 3$; 7.0%), and first generation Canadian ($n = 17$; 39.5%).

Procedures

Students were recruited through the contact lists of the Faculty of Kinesiology and Physical Education. All registered students eligible to enrol in the field placement, including students in years three, four or five of their undergraduate degree, were sent an email inviting them to complete a 10-minute online anonymous survey, which was developed for the purpose of this study. The survey was provided to both those who had and had not completed a field placement. Survey questions were grounded in the transtheoretical stages of behaviour change model and were also guided by specific themes identified based on barriers to WIL reported in previous literature. Students who had not participated in the field placement were asked to complete the full survey, which included questions about their respective stages of behavioural change in progressing towards engagement in the field placement, and the associated barriers experienced. A series of questions then followed regarding the students' self-efficacy for completing the field placement. In addition to the placement specific questions, participants also completed a series of demographic questions (e.g., gender, sexuality, race, nationality), as well as questions about other demographic factors potentially influencing decisions to engage in WIL, including GPA, student financial aid status, registration with accessibility services, engagement in paid work beyond the University, commute time, caregiver responsibilities, and mature student status (e.g., students who have already completed a degree prior to enrolling in their current degree program and/or have returned to University following years of paid work experience). Students who had participated in the field placement completed the same survey; however, questions about barriers to engaging in the field placement were skipped.

Data analysis

Survey data were analyzed descriptively, and using Pearson's correlation analysis and Spearman's rho correlations to observe relationships between the continuous variables being measured in this study (Schober et al., 2018). Pearson's correlation analysis was used to determine a correlation between barriers to WIL engagement and students' demographic variables, such as self-identifying as LGBTQ2SIA+, BIPOC, international, or having a disability. The correlation between barriers to WIL engagement and students' perceived value of WIL was also measured using Pearson's correlation analysis. Spearman's rho correlations were used to assess differences in self-efficacy between student groups who had and had not completed a placement.

Phase 2: Semi-Structured Interviews

Participants

Semi-structured interviews were completed with 17 students, made up of almost equal numbers of both those who had either completed or not completed a placement. Interviews and anonymous surveys were completed concurrently, and as such, it is possible that some students participated in both. Efforts were made to recruit students with diverse demographic backgrounds (i.e., gender, race, registration with accessibility services), given an awareness of the nuanced experiences of barriers to WIL engagement within these underrepresented groups. Aligned with this, it was a priority for researchers to recognize the complex and multi-faceted nature of identity, and so students were encouraged to note all demographic variables that they felt applied to them, with the understanding that there may be overlap between categories (i.e., self-identifying as LGBTQ2SIA+ and BIPOC). Among the interviewees, 14 participants identified as female (n=14), two identified as male (n=2) and one individual chose not to disclose (n=1). While the majority of participants identified as heterosexual (n=13), two individuals identified as LGBTQ2SIA+ (n=2) and two individuals chose not to disclose (n=2). Two participants self-identified as a person with a non-visible disability (n=2). Over half of the participants identified as Black or a person of color (n=9), and one individual self-identified as Indigenous, belonging to the Metis community (n=1). Seven participants identified as being first generation Canadian (n=7).

Procedures

Students were asked to discuss their perceived barriers to participating in the field placement and the placement application process. A copy of the letter of information and informed consent was read and signed by the participant before each interview began. Interviews ranged in length from 30 – 60 minutes and each began with the general question, “Are you aware of the opportunity to complete a placement?” and “Are there any reasons why you may not want to complete a placement?” Interviews were transcribed verbatim. Pseudonyms were applied and any identifiable information was removed during the process of transcription.

Data analysis

The interview data were analyzed thematically using a combination of inductive and deductive analysis techniques (Braun & Clarke, 2006). Thematic analysis was chosen as it permits social and psychological interpretations of the data, which are relevant to the reviewed literature and proposed inquiry (Denzin & Lincoln, 2017). Augmenting this process with inductive and deductive analysis techniques helped to generate a robust understanding of participants’ perspectives on the research question and contextualize both the novelty and significance of participants’ responses within existing literature on the topic.

RESULTS

The following sections present the findings on students’ perspectives of the barriers to engaging in an optional unpaid field placement across survey and interview data. Collective findings are presented in relation to the stages of behavioral change, barriers to engagement across the themes of feasibility and logistics, preparation and the workplace, and finally, the impact of moderating factors, namely the perceived value of WIL and students’ self-efficacy.

Stages of Behavioral Change

The transtheoretical model was applied to better understand where students who had not participated in the field placement reside in the process of engaging or not engaging. The anonymous online survey included three questions for each of the stages of pre-contemplation, contemplation, preparation, action and maintenance, and students who agreed with two or more questions in each stage were coded as residing in that stage of the process. As illustrated in Table 1, students who completed the survey reside across all stages, with the majority of students in the preparation stage. Notably, given the complex nature of behavioral change, students can be in more than one stage at once, therefore, the total percentage of students in each stage adds up to greater than 100%. While it is surprising to see two students who have not completed the placement in the stage of maintenance, closer examination of these students' survey responses found that they had previously applied to complete a placement but did not secure one, and so were in the process of applying again.

TABLE 1: Behavioral change stages of students who have not completed a placement.

Stage	Number of Participants (n = 43)	Percentage
Pre-Contemplation	13	22
Contemplation	7	12
Preparation	35	60
Action	9	16
Maintenance	2	3

Barriers to Work-Integrated Learning Engagement

In examining students' perspectives of the barriers to engaging in the optional field placement, a series of feasibility, logistical and workplace barriers were reported, as well as barriers associated with preparation. Perceived value of the field placement was high amongst the sample of student participants.

Feasibility and logistical barriers

Of the data collected, feasibility and logistical barriers were among the most commonly reported by students. As illustrated in Table 2, 37% of students who did not complete a placement responded that they would be more likely to complete one if it were for a shorter time period. Aligned with this sentiment, 67% of students reported a preference for the field placement to run over the summer. Interestingly, recognition that the length of the placement was a barrier to engagement was most highly correlated with GPA ($-0.335, p < 0.05$). The greatest feasibility barrier reported was financial, with 88% of respondents reporting that they would be more interested in completing a placement if it were paid, and 49% indicating that they were interested in completing a placement but cannot afford to work for free. Unsurprisingly, agreement with this statement was most significant amongst students receiving financial aid ($0.370, p < 0.05$).

When interviewed, several students spoke of logistical issues, namely that the time required for the field placement experience was challenging, and balancing work hours with class hours was reported by these students as one of the main barriers to participation. Students spoke about the barrier of 'hidden hours', such as time for transportation or workplace related events (e.g., staff socials, conferences) that increase the amount of allotted time for the placement beyond 120 hours. Transportation challenges were most significantly correlated with self-identifying as BIPOC ($0.388, p < 0.05$), international ($0.311, p < 0.05$), and currently working ($0.321, p < 0.05$). Specifically, the cost of

transportation to different WIL locations was reported to affect students' decisions when applying for certain placement sites. In addition, students who participate in the placement are asked to pay a student fee on top of their tuition:

I know there's a charge when you are doing a placement, and I have spoken to a couple friends of mine that have said that's the reason they don't want to do it. I know it's not a lot of money, but maybe for some people, it's extra cash that they don't want to spend.

Some participants went on to suggest that the additional fee be subsidized or included in tuition to potentially assist those requiring financial aid. These findings reflect students' recognition that individuals coming from a background with a lower socio-economic status may face greater barriers in accessing WIL.

Workplace barriers

Findings revealed that students' perceptions of the workplace affects whether or not they choose to enroll in the field placement. Some students (5%) who had chosen not to engage in WIL report that they are not interested in taking the field placement because they are concerned about discrimination or harassment in the workplace. This finding was significantly correlated with several demographic variables, including students who self-identified as international (.434, $p < 0.01$), BIPOC (.323, $p < 0.05$), LGBTQ2SIA+ (.304, $p < 0.05$), students with a non-visible disability (.304, $p < 0.05$), mature students (.304, $p < 0.05$), and students with caregiving responsibilities (.320, $p < 0.05$). One student made the following comment about submitting their resume as a part of the application process:

You always hear for resumes that you might want to change your name to make it sound a little bit more "White", for example. I haven't heard that for placements specifically, but just in general with the stigma that is going on... or maybe change your address because people will start to stereotype you based off the area that you live in.

Several students also offered commentary on workplace barriers that impacted the quality of their experience trying to engage in WIL. A student spoke about experiencing discrimination during the interviewing process:

The two guys were super sexist. It was so uncomfortable. I've never been so uncomfortable in my life. As soon as I walked in, they were looking me up and down and I was just mortified. I was so uncomfortable [...] as soon as I got home, I was like 'that's a hard no for me.' I wanted no part of it. He was like leaning in close and was like, 'Well, we'll consider you.' I was so uncomfortable.

International students also identified barriers in securing a placement. Referring to the pre-placement application process that begins in May, after many students have left campus, one student stated:

For people who are international, Skype [interviews] and call [interviews] will have a lesser chance of getting selected [...] To tell you the truth, if I knew, I would have stayed maybe two weeks more before going home for the summer. I would have shown up in person and asked if it were possible to accelerate the process for me.

TABLE 2: Barriers reported by students who have not completed the placement.

	Agree (%)
Feasibility and Logistical Barriers	
I don't have time to complete a placement.	18
The placement application process is too time consuming for me to complete.	14
The timing of the placement application process is a challenge.	12
I'd be more likely to complete a placement if it was for a shorter time period.	37
I'd be more likely to complete a placement if it was over the summer term.	67
The cost of the placement fee keeps me from completing a placement.	35
I am interested in taking a placement but I can't afford to work for free.	49
I'd be more interested in completing a placement if it was paid.	88
Transportation constraints keep me from applying for a placement.	26
Accessibility needs keep me from applying for a placement.	2
I'd be more likely to do a placement if it was compulsory for my future career or program of study.	54
Workplace Barriers	
I am interested in taking a placement but there are no placement opportunities offered that are of interest to me.	12
I am not interested in taking a placement because I am concerned about discrimination or harassment in the workplace.	5
Barriers in Preparation	
I want to do a placement but I don't feel prepared for the placement tasks.	28
I applied for a placement but did not get one.	9
My discomfort with being evaluated in the interview process keeps me from applying for a placement.	11
I worry about being successful in securing a placement.	65
I am not taking a placement because I am uncertain about what the placement would entail.	16
I didn't know about the placement opportunity.	24
I have been searching for information to start the placement application process.	63
If the placement staff were more available I would be more inclined to complete the placement application process.	47
The placement application process is overwhelming and keeps me from applying for a placement.	33

Barriers in preparation

Among the survey respondents generally, 65% of students worry about not being successful in securing a placement. Of students who had not completed the placement, 11% agree that being evaluated in the interview process keeps them from applying for a field placement. Moreover, 28% of non-placement students report interest in the placement, however, do not feel prepared for the tasks they will be given. This finding was significantly correlated with several demographic variables including students who self-identified as LGBTQ2SIA+ (.341, $p < 0.05$), BIPOC (.429, $p < 0.05$), international (.577, $p < 0.01$), having a non-visible disability (.341, $p < 0.05$), and year of study (.367, $p < 0.05$). Looking more specifically at the barriers experienced within the placement application process, 63% of the students surveyed had been searching for information to start the application process itself. As well, 47% of the students would reportedly be more inclined to engage in the placement application process if the placement staff were more available.

Speaking to the preparatory supports available, students registered with accessibility services described a lack of support throughout the placement application process. One student shared, “Literally there is nothing through [the WIL information session], and there is no accessibility support, especially through the [application] process.” This student, who self-identifies as an individual who requires accessibility services, went on to explain that often the support required when enrolling in WIL is more specialized and may get lost among other types of more generalized accessibility support tasks. Students with accessibility needs require a more effective support system in order to increase enrolment rates, “Because, really, the people with accessibility needs are the ones that fall through the cracks. That’s just what it is.” Furthermore, another student with accessibility needs pointed out additional feasibility barriers associated with participation in the application process. One student explained, “Because I am on the autism spectrum, I don’t necessarily do well with new people. Especially in an interview setting.”

Factors Moderating Decisional Balance

As introduced earlier, behavior change is complex and influenced by decisional balance. Results pertaining to the factors that moderate this decisional balance, namely the perceived value of WIL (Table 3) and student’s self-efficacy (Table 4), are discussed below.

Perceived value of work-integrated learning

Of the student participants not enrolled in the placement, there was strong consensus on the value of the field placement experience. All students surveyed who had not completed a field placement, report that they would value the increased knowledge gained from completing the placement. Of all students surveyed, 98% felt that completing the field placement would strengthen their resume, and 93% believe that the field placement would open up more opportunities for them. Similarly, interviewed participants spoke about the positive influence that WIL can have on their career paths, including improving resumes as well as helping participants clarify what their ideal careers might look like. Gaining a deeper understanding of professional positions was another topic discussed frequently:

I think it’s kind of an experience – a sneak peek of what’s to come. I know that job shadowing opportunities give you a better insight of what the career is going to be like, and it has really helped me (in the past) figure out what I do and don’t want to do. And I think the placement can also help [contribute to that].

Other students discussed the benefits of creating relationships with their mentors and knowing professionals in their area of interest. One student stated, “Networking is by far the best advantage you can get out of it [the field placement].” At the same time, when interviewed and asked how WIL ranked compared to other degree offerings, a range of perceptions of WIL were revealed. Some students prioritized other academic offerings, as reflected in the following comment, “I definitely don’t think it [work-integrated learning] is as important as anatomy or biomechanics or something like that... You need to have anatomy to understand what you are going to do in the placement.” On the other hand, another student explained, “I think placements are equally as important, if not more important [than other academic offerings] because you can be great at school and awful in a work environment.” Student demographics highly correlated with the desire to complete a placement but needing to prioritize other academic offerings, include year of study ($-0.457, p < 0.01$) and students currently working ($.600, p < 0.01$).

TABLE 3: Factors moderating decisional balance: perceived value of Work-Integrated Learning.

	Agree (%)
I believe that students who complete a placement are more prepared for work following graduation.	93
I believe that students who complete a placement are more prepared for further study following graduation.	88
I get upset when I think about not completing a placement.	54
Completing a placement will strengthen my resume	98
I would value the increased knowledge and skills I would gain from completing a placement.	100
Completing a placement would open up more opportunities for me.	95
I am not interested in a placement because I already have work or volunteer experience.	2
I want to do a placement but have to prioritize other academic offerings (for graduation/graduate school)	47

Self-efficacy

The final theme identified was students' perceived efficacy in securing a placement and succeeding in the field placement as a factor moderating decisional balance. In comparing students who had and had not completed the field placement, there was a significant difference in the students' confidence in attaining a placement position with a mentor (.392, $p < 0.01$), but no difference found between confidence levels in completing the placement activities, receiving positive evaluations in the placement, or receiving positive evaluations in the placement offering.

TABLE 4: Factors moderating decisional balance: differences in self-efficacy between student groups.

	Non-placement students (%)	Placement students (%)	Spearman's rho Correlations
I can be matched with a mentor for a placement.	51%	85%	.392**
I can do well in performing placement activities.	84%	87%	.035
I can receive a positive evaluation in the placement offering.	82%	90%	.083
I can receive a positive evaluation on my placement performance.	84%	93%	.077

**Correlation is significant at the 0.01 level.

DISCUSSION

This study applied the transtheoretical stages of behavioral change model to examine undergraduate kinesiology students' perspectives of the barriers to engaging in an optional unpaid field placement, including both students who have and have not completed a field placement. Student participants who did not complete a placement reported that work-integrated learning opportunities are highly valued, but feasibility, logistical, workplace and preparatory barriers imposed constraints on students' engagement. This research advances previous literature focused on barriers to a positive WIL experience, by including a lens on factors that are specifically preventing students from deciding to enrol in WIL to begin with.

Feasibility and logistical barriers to WIL engagement reported by the students in this study included time (i.e., hidden hours, length of placement, time of year) and financial constraints (i.e., unpaid hours, placement fee). Building on previous research that criticizes students' timetables as being too structured and unaccommodating of elective work-integrated learning offerings (Lawlis et al., 2014), findings from the current study add that this barrier may be heightened for students who also engage in a high volume of co-curricular activity, work part-time, and those with caregiving responsibilities. Additionally, our results suggest that the decision to commit to engaging in an unpaid field placement may also prove particularly difficult for commuting students, who must take time for transportation into consideration for both campus based requirements and on-site placement hours.

Students' discussion of financial constraints mirrored previous research, which also noted finances as a limiting variable to WIL engagement, especially for unpaid WIL opportunities. In providing insight from an international co-operative education program for Canadian undergraduate business students, Behrisch (2016) reiterates that the cost of placements, as well the potential of extending their degree time, were significant barriers for students' engagement decisions. Students in our study echoed these cost concerns and, in-line with previous research, recommended that financial bursaries and scholarships be available to offset some of the financial challenges impacting student access (Behrisch, 2016; Canadian Bureau for International Education, 2015). Overall, students' perspectives on feasibility and logistical barriers, which were correlated with identifying as BIPOC, needing financial aid, international status, or already working, highlight the broader impact that socio-economic status can have on students' decisions to engage in an optional unpaid field placement.

In the present study, some students reported a concern for potential discrimination in the workplace as a barrier preventing them from taking the field placement. This sentiment is reflected in existing literature. When exploring the discrimination experienced by international students specifically, Wall et al. (2017) report that students may face many forms of discrimination and are not always afforded recognition for the relevant skills and experience that they have developed internationally, outside of the institution that they are currently attending. They further report that Indigenous students experience racism in both subtle and overt forms in their placements, reducing the quality of their WIL experience and potentially leading to reduced participation. Our findings advance this previous research by highlighting the concern for potential discrimination as a barrier in and of itself. It is important to note that concerns of discrimination in the WIL environment correspond with the omnipresence of larger systemic oppressions, such as racism, sexism, and xenophobia, and shared effort and responsibility is needed to address and mitigate their impact on student access and engagement in WIL.

While most higher education institutions have processes and supports in place to prevent and address discriminative student experiences, the above findings suggest that more work is needed to highlight these supports in advance of students applying for a placement, as a way to both acknowledge the justified concern and share the supports available for students, should need arise. This recommendation is echoed by others who have emphasized that strategies for advancing equity should focus on increasing student preparation to address forms of discrimination prior to their WIL experiences, as well as providing specific support resources for students in WIL, such as one-on-one student advisors (Wall et al., 2017). However, it is important to note that this approach has been criticized for placing the responsibility for preventing and addressing issues of discrimination on the student. Accordingly, it is posited that consistent messaging about intolerance for discriminatory behaviors and increasing faculty, student and mentor awareness, can be used as strategies that may positively influence engagement in WIL from under-represented student groups. Aligned with these

suggestions, in order to continue advancing equity in WIL, program coordinators responsible for approving placement sites for students should also consider available information on workplaces' existing reputation, workplace climate and commitments to diversity, equity and inclusion.

The current research found that perceived barriers related to preparation (i.e., access/availability of program information, missing support through the application process, lack of self-efficacy) for the placement were correlated with several demographic variables, including students who self-identified as LGBTQ2SIA+, BIPOC, international, having a non-visible disability, and year of study. In addition to this, scholars have also reported other variables that may influence preparatory barriers for student access and decision to engage in WIL, such as students' poor communication skills and lack of awareness of labor market politics (Blackmore et al., 2012; International Education Association of Australia, 2012; Jackson, 2016). When comparing students who had engaged in the placement with those who had not, the most significant differences related to perceptions of preparatory barriers was in their self-efficacy to succeed in a placement interview and be matched with a mentor for a placement.

Brooks and Youngson (2016) offer context and suggestions to address students' lack of self-efficacy in the application process. They share that students "moderate their ambitions" and apply to a variety of jobs as a search strategy (p. 1575); persistent students who continue to apply for placements despite rejections use these rejections as opportunities to learn and request feedback, which eventually leads to their success securing placements. This can both improve students' statistical chances of securing a placement and their decisional balance through increased self-efficacy, which may address this barrier as expressed by the students in this study. However, Brooks and Youngson (2016) have also advised that students using this approach may create a self-imposed barrier to their engagement in WIL. For example, a potential host organization may perceive multiple applications from a student as a lack of qualification or focus, or students may not have the resources to maintain high quality work and/or preparation across all of their applications and interviews.

All reported barriers and the moderating impact of self-efficacy considered, students' perceived value of the placement was varied. Students' survey responses were steadfast in demonstrating the widespread value placed on work-integrated learning experiences. Conversely, students interviewed expressed a variety of opinions on the perceived value of the placement to their learning and future career preparation. Varying perceptions of the value of WIL across interview participants may be attributed to the opportunity they were given to offer rich accounts of the topic as contextualized within their unique beliefs and experiences, a clear strength of an interviewing approach. Given their varied expectations of WIL, students' success in achieving their expectations should be promoted in order to increase WIL engagement. Examples of these expectations include those suggested by participants in Hardie et al. (2018), which were also referenced by students in the present study, including "to gain real life work experience in their current field of study", "to increase their knowledge and experience", and "to validate their career choice and see if they were really suited for the type of job they were currently being trained for at university" (Hardie et al., 2018, p. 159-160).

IMPLICATIONS

By examining students who had not completed the placement, the current study advances previous research focusing on general (HEQCO, 2018; Jackson et al., 2017; Lawlis et al., 2014; Martin & Leberman, 2005) and population-specific barriers to WIL (Cooper et al., 2010; Gair et al., 2015; Hubain et al., 2016; Katrevich & Aruguete, 2017; Tran & Soejatminah, 2017; Wall et al., 2017). It was found that students were at various stages in deciding to engage or not engage, including the stages of pre-contemplation,

contemplation, preparation, action and maintenance. This finding is significant as it suggests that despite having a well-designed WIL program and pedagogy, barriers pertaining to feasibility, logistics, the workplace and preparation will continue to be pervasive, as long as a reliance exists on a 'one-size-fits all' approach to promoting WIL access and engagement. Furthermore, akin to the rationale for recognizing contextual and individual variables, this research emphasizes that students' stage of behavioral change should also be taken into consideration when promoting WIL. Ideally, institutions looking to promote access and engagement in WIL experiences should consider implementing a needs assessment or survey, in order to understand the behavioral stage that students are at and target promotional strategies accordingly. Alternatively, as was the case with this study, if students present across the breadth of stages, then a variety of promotional strategies should be applied to reach students within and/or between each stage.

As an example, to attract students in the pre-contemplation stage where they have no intention of engaging in the field placement and may be unaware that the WIL opportunity exists, strategies may include the use of social media or information sessions to promote awareness. Students in the contemplation stage who have an intention to engage in the field placement would benefit from interventions that positively moderate their decisional balance. This could include sharing the potential benefits of the experience to increase their perceptions of the value of WIL, promoting flexible timing for placement completion, and providing financial bursaries. Additionally, providing opportunities for students to practice the skills needed to secure and succeed in a placement may help to raise their self-efficacy regarding the placement process (e.g., workshops on resume-writing, interviewing and professional communication). Students in the preparation stage who plan to take action to engage in the WIL experience would benefit from one-to-one advising on preparation and application support. Finally, students in the stages of action and maintenance already taking steps towards engagement may benefit from interventions such as preparatory sessions to improve their self-efficacy and competence in securing a placement match, as well as addressing systemic barriers that may be in place, such as not enough placements, variety of placements, or other barriers in the selection process.

LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH

Although the present study makes novel contributions to research on barriers to access and engagement in work-integrated learning, several limitations of this work must be acknowledged. Firstly, this study was only conducted with students in one program (Kinesiology & Physical Education) at a Canadian higher education institution. Moreover, only students in their third, fourth and fifth year, were invited to participate in both surveys and interviews. Finally, the current research only examined students' perspectives of barriers to accessing and engaging in WIL in relation to one elective unpaid field placement. As such, general recommendations for future research include exploring a larger student sample across more diverse WIL types and institutional programs. In addition to this, as interest in and adoption of WIL programs continues to grow in higher education, gathering information from younger students (i.e., first and second year) on their behavioural intentions, perspectives on barriers, self-efficacy to engage and the perceived value of WIL, may prove useful. This data can be used to inform the implementation of appropriate promotional/support strategies in order to facilitate increased WIL enrollment when these students become eligible to participate.

In considering the advancement of WIL and in attempt to enhance participation in WIL, further research is required to continue to understand and address barriers experienced by students who choose not to engage in WIL. In line with findings from this study, specific research is needed to explore the nuanced experiences of the reported barriers, given the frequency with which they were reported

by underrepresented student groups. While this study included participants across sexual orientation, gender identity, race, ethnicity, immigration and ability status, there were small numbers of respondents in some of these categories, so additional research is needed to examine how barriers may impact students with these identities. With the diversity of the student population increasing (Kirby, 2009; Kraglund-Gauthier et al., 2014; Michalski et al., 2017) and observing more students identifying across one or more of these underrepresented groups, concerns of discrimination reported as occurring within the placement or in the selection process, are alarming and warrant immediate attention from researchers and practitioners alike. Effective strategies are needed to preemptively address and mitigate these concerns for students, as they impact their ability to comfortably and confidently access, engage and internalize the benefits of work-integrated learning.

CONCLUSION

In summary, this research employed a mixed-methods convergent parallel design to investigate undergraduate kinesiology students' perspectives of the barriers to engaging in an optional unpaid WIL opportunity. Participants included both students who had and had not completed the field placement. In this research, emergent themes demonstrated that there are feasibility, logistical, workplace and preparatory barriers for students considering engaging in WIL. Moreover, it was found that students who had not completed the placement were at various stages of deciding to engage or not engage, including the stages of pre-contemplation, contemplation, preparation, action and maintenance. This suggests that strategies for promotion and intervention must address each of these stages to be most effective in increasing access to and WIL participation across all students.

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REFERENCES

- Behrisch, T. (2016). Cost and the craving for novelty: Exploring motivations and barriers for cooperative education and exchange students to go abroad. *Asia-Pacific Journal of Cooperative Education*, 17(3), 279-294.
- Billett, S. (2009). Realising the educational worth of integrating work experiences in higher education. *Studies in Higher Education*, 34(7), 827-843. <https://doi.org/10.1080/03075070802706561>
- Blackmore, J., Gribble, C., Farrell, L., Rahimi, M., Arber, R., & Devlin, M. (2014). *Australian international graduates and the transition to employment: Final report*. Deakin University. https://www.deakin.edu.au/_data/assets/pdf_file/0010/365194/international-graduates-employment.pdf
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101.
- Brooks, R., & Youngson, P. L. (2016). Undergraduate work placements: an analysis of the effects on career progression. *Studies in Higher Education*, 41(9), 1563-1578. <https://doi.org/10.1080/03075079.2014.988702>
- Business Higher Education Roundtable. (2016). *Taking the pulse of work-integrated learning in Canada*. <https://bher.ca/category/research-publications/taking-pulse-work-integrated-learning-canada-full-report>
- Canadian Bureau for International Education. (2015). *Canada's performance and potential in international education 2015*. <https://cbie.ca/infographic-canadas-performance-and-potential-in-international-education/>
- Cooper, L., Orrell, J., & Bowden, M. (2010). *Work integrated learning - A guide to effective practice*. Routledge; Taylor & Francis.
- Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and conducting mixed methods research* (2nd ed.). Sage.
- Denzin, N. K., & Lincoln, Y. S. (Eds.). (2017). *The Sage handbook of qualitative research*. Sage.
- Dunn, L. A., Schier, M. A., Hiller, J. E., & Harding, I. H. (2016). Eligibility requirements for work-integrated learning programs: Exploring the implications of using grade point averages for student participation. *Asia-Pacific Journal of Cooperative Education*, 17(3), 295-308.
- Dunning, S. J., & Artino, A. R. (2011). *Situativity theory: A perspective on how participants and the environment can interact*. Sage.

- Gair, S., Miles, D., Savage, D., & Zuchowski, I. (2015). Racism unmasked: The experiences of Aboriginal and Torres Strait Islander students in social work field placements. *Australian Social Work*, 68(1), 32–48. <https://doi.org/10.1080/0312407X.2014.928335>
- Hardie, G., Almeida, S., & Ross, P. J. (2018). Value of industry mentoring and resource commitment to the success of an undergraduate internship program : A case study from an Australian university. *International Journal of Work-Integrated Learning*, 19(2), 155–168.
- Higher Education Quality Council of Ontario. (2018). *Stakeholder summary - High demand for WIL program, but barriers keep certain students out*. <https://heqco.ca/pub/barriers-to-work-integrated-learning-opportunities/>
- Hubain, B. S., Allen, E. L., Harris, J. C., & Linder, C. (2016). Counter-stories as representations of the racialized experiences of students of color in higher education and student affairs graduate preparation programs. *International Journal of Qualitative Studies in Education*, 29(7), 946–963. <https://doi.org/10.1080/09518398.2016.1174894>
- International Education Association of Australia. (2012). *Internships and work placement opportunities for international students in Victoria*. https://unigrad.weebly.com/uploads/1/2/6/6/126632088/internships_and_work_placement_opportuni.pdf
- Jackson, D. (2016). Deepening industry engagement with international students through work-integrated learning. *Australian Bulletin of Labour*, 42(1), 38–61.
- Jackson, D., Rowbottom, D., Ferns, S., & McLaren, D. (2017). Employer understanding of work-integrated learning and the challenges of engaging in work placement opportunities. *Studies in Continuing Education*, 39(1), 35–51. <https://doi.org/10.1080/0158037X.2016.1228624>
- Jones, G. A. (2014). An introduction to higher education in Canada. In K. M. Joshi & S. Paivandi (Eds.), *Higher education across nations* (Vol. 1, pp. 1–38). B. R. Publishing.
- Kantar, L. D., Ezzeddine, S., & Rizk, U. (2020). Rethinking clinical instruction through the zone of proximal development. *Nurse Education Today*, 95, Article 104595. <https://doi.org/10.1016/j.nedt.2020.104595>
- Katrevich, A. V., & Aruguete, M. S. (2017). Recognizing challenges and predicting success in first-generation university students. *Journal of STEM Education: Innovations and Research*, 18(2), 40–44.
- Kirby, D. (2009). Widening access: Making the transition from mass to universal post-secondary education in Canada. *Journal of Applied Research on Learning*, 2(3), 1–17.
- Kraglund-Gauthier, W. L., Young, D. C., & Kell, E. (2014). Teaching students with disabilities in post-secondary landscapes: Navigating elements of inclusion, differentiation, universal design for learning, and technology. *Transformative Dialogues*, 7(3), 1–9.
- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Prentice Hall.
- Lawlis, T. R., Anson, J., & Greenfield, D. (2014). Barriers and enablers that influence sustainable interprofessional education: A literature review. *Journal of Interprofessional Care*, 28(4), 305–310. <https://doi.org/10.3109/13561820.2014.895977>
- Marcus, B. H., Eaton, C. A., Rossi, J. S., & Harlow, L. L. (1994). Self efficacy, decision making, and stages of change: An integrative model of physical exercise. *Journal of Applied Social Psychology*, 24, 489–508. <https://doi.org/10.1111/j.1559-1816.1994.tb00595.x>
- Martin, A., & Leberman, S. (2005). Keeping up with the play: Practicum, partnership and practice. *Asia Pacific Journal of Cooperative Education*, 6(2), 17–25.
- Michalski, J. H., Cunningham, T., & Henry, J. (2017). The diversity challenge for higher education in Canada: The prospects and challenges of increased access and student success. *Humboldt Journal of Social Relations*, 39, 66–89.
- Patrick, C., Peach, D., Pocknee, C., Webb, F., Fletcher, M., & Pretto, G. (2008). *The WIL [work integrated learning] report: A national scoping study*. Australian Learning and Teaching Council.
- Prochaska, J. O., & Diclemente, C. C. (1982). Transtheoretical therapy: Toward a more integrative model of change. *Psychotherapy: Theory, Research and Practice*, 19(3), 276–288. <https://doi.org/10.1037/h0088437>
- Schober, P., Boer, C., & Schwarte, L. A. (2018). Correlation coefficients: appropriate use and interpretation. *Anesthesia & Analgesia*, 126(5), 1763–1768. <https://doi.org/10.1213/ANE.0000000000002864>
- Shankar, J., Ip, E., Khalema, E., Couture, J., Tan, S., Zulla, R., & Lam, G. (2013). Education as a social determinant of health: Issues facing Indigenous and visible minority students in postsecondary education in western Canada. *International Journal of Environmental Research and Public Health*, 10(9), 3908–3929.
- Smith, C., Ferns, S., Russell, L., & Cretchley, P. (2014). *The Impact of work-integrated learning on student work-readiness: Final report*. Office for Teaching & Learning. https://www.academia.edu/25354791/The_Impact_of_work_integrated_learning_on_student_work_readiness
- Tran, L. T., & Soejatminah, S. (2017). Integration of work experience and learning for international students: From harmony to inequality. *Journal of Studies in International Education*, 21(3), 261–277. <https://doi.org/10.1177/1028315316687012>

- Universities Australia, ACCI, AiGroup, Business Council of Australia, & ACEN (2015). *National strategy on work integrated learning in university education*. <http://cdn1.acen.edu.au/wp-content/uploads/2015/03/National-WIL-Strategy-in-university-education-032015.pdf>
- Wall, T., Tran, L. T., & Soejatminah, S. (2017). Inequalities and agencies in workplace learning experiences: International student perspectives. *Vocations and Learning*, 10(2), 141–156.
- Wilson, T. (2012). *A review of business – university collaboration*. Department for Business, Innovation and Skills. <https://tinyurl.com/4zam9m27>
- Zegwaard, K. E., & Hoskyn, K. (2015). A review of trends in research methods in cooperative education. In *Proceedings of the 18th New Zealand Association for Cooperative Education Conference* (pp. 59-62). NZACE.

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The International Journal of Work-Integrated Learning (IJWIL) publishes double-blind peer-reviewed original research and topical issues dealing with Work-Integrated Learning (WIL). IJWIL first published in 2000 under the name of Asia-Pacific Journal of Cooperative Education (APJCE). Since then the readership and authorship has become more international and terminology usage in the literature has favored the broader term of WIL, in 2018 the journal name was changed to the International Journal of Work-Integrated Learning.

In this Journal, WIL is defined as "*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. Defining elements of this educational approach requires that students engage in authentic and meaningful work-related task, and must involve three stakeholders; the student, the university, and the workplace*". Examples of practice include off-campus, workplace immersion activities such as work placements, internships, practicum, service learning, and cooperative education (Co-op), and on-campus activities such as work-related projects/competitions, entrepreneurship, student-led enterprise, etc. WIL is related to, but not the same as, the fields of experiential learning, work-based learning, and vocational education and training.

The Journal's main aim is to enable specialists working in WIL to disseminate research findings and share knowledge to the benefit of institutions, students, co-op/WIL practitioners, and researchers. The Journal desires to encourage quality research and explorative critical discussion that leads to the advancement of effective practices, development of further understanding of WIL, and promote further research.

The Journal is ongoing financially supported by the Work-Integrated Learning New Zealand (WILNZ), www.nzace.ac.nz and the University of Waikato, New Zealand, and received periodic sponsorship from the Australian Collaborative Education Network (ACEN) and the World Association of Cooperative Education (WACE).

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Types of manuscripts sought by IJWIL is primarily of two forms; 1) *research publications* describing research into aspects of work-integrated learning and, 2) *topical discussion* articles that review relevant literature and provide critical explorative discussion around a topical issue. The journal will, on occasions, consider best practice submissions.

Research publications should contain; an introduction that describes relevant literature and sets the context of the inquiry. A detailed description and justification for the methodology employed. A description of the research findings - tabulated as appropriate, a discussion of the importance of the findings including their significance to current established literature, implications for practitioners and researchers, whilst remaining mindful of the limitations of the data, and a conclusion preferably including suggestions for further research.

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